FUNCTION OF SECONDARY EDUCATION

The Services Rendered the State of Tennessee by Its First-Class County High Schools

BY
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HUNTSVILLE, TEXAS

GEORGE PEABODY COLLEGE FOR TEACHERS
CONTRIBUTIONS TO EDUCATION
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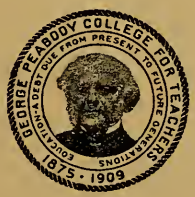

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CHAPTER I

THE FUNCTION OF SECONDARY EDUCATION.

The Services Rendered the State of Tennessee by its First-Class County High Schools.

THE PROBLEM STATED

INTRODUCTION.

The demand for efficiency made upon all public and private institutions during the last decade is beginning to have a decided effect upon the public high school. More and more is the efficiency of high school education being questioned when looked at by the trained educator from a business standpoint. He concludes thus: If the majority of the pupils who graduate from the elementary school regard a secondary education of enough importance to enter the high school, is the high school, then, to be considered an efficient institution when over one-third of all those who enter drop out by the end of the first year, with the result that less than one-third of the freshman class remain to graduate?

This conclusion is further substantiated, and rightfully so, by the facts that between 1900 and 1910 the number of pupils in public high schools in the United States increased over 76 per cent; that the number of teachers increased in the same period over 100 per cent; that the number and value of high school properties, including improvement in the quality and quantity of facilities for work in libraries, laboratories, gymnasiums, increased proportionately during the same period. On the other hand, for twenty years there has been no increase of importance in the percentage of pupils who are being graduated. Taking the country over, we find that far less than half of those who enter, graduate. In the majority of the Southern states, the number of graduates falls as low as ten or eleven per cent of those who enter. But the fact that approximately eighty-six per cent do not complete the course indicates that most of those who thought it worth while to enter the high school, for various reasons do not find it possible, or perhaps worth while, to complete the course.

When the search light of inquiry is turned on this high school situation, the problem of elimination is recognized as one of the great number of outstanding problems. The modern trained educators together with the practical business men are demanding that the modern high school be so reorganized as to meet the needs of modern times; and that community needs, to a large degree, color the activities of the high school. They realize that the American high school was organized and was developed before our present complex industrial and social civilization had evolved. They know that during its early development the curriculum of the high school, its methods, ideals, and values were worked out and its aims and purposes were in most part determined with reference to social conditions and educational conceptions which no longer obtain. The function of the high school came to be the offering of certain fixed courses of study, and the preparing of pupils to pass certain examinations demanded for admission to college, to which the high school was tributary. Certain traditional offerings in required subject matter were made, but the utilitarian value of the offerings in terms of social service, was in no way emphasized. This condition, although it is gradually changing, is yet the predominating element in high school administration.

In the meantime, we as a people have experienced vast and far-reaching social and industrial changes which have profoundly modified almost all phases of life among us, and the end of this change is not yet in sight. From a small and isolated nation, with simple social, industrial, and political problems, we have evolved into a world-power with world-problems facing us. From a rural and agricultural nation we have changed in many centers into an urban and manufacturing people. Large cities with congested populations have developed among us new social and industrial classes with new social and industrial needs. Many new trades and professions have been developed, each in turn calling for special, and often, extended training.

Since the burden of preparing the future citizens to meet these new social, industrial, and political conditions is being thrown more and more on the schools, the demand is growing more urgent that the spirit and the organization of the high school be changed to meet these conditions. As a result of these new de-

mands, there has developed in some centers a modern high school which has a diversified curriculum with free electives, and which is dominated by the democratic spirit of giving the greatest service to the greatest number.

The college of the past prepared almost exclusively for the four "learned professions." It was fitting, therefore, that the curriculums of both college and high school should be narrow and prescribed. Under that system the high school retained for graduation a small minority of its students, while the vast majority of boys and girls of that day never entered such an institution. Many who did enter soon left for more congenial employment in business or industrial life. They left school because of their inability to do the "bookish" kind of work demanded. Those who survived the systems of training imposed, but who were not able to go to college, found themselves poorly prepared for active participation in the busy commercial and industrial world outside the walls of the school-room.

To train pupils for college entrance is still one of the functions of the high school; yet it is *only one.* The modern high school mentioned above, with its diversified curriculum, large range of electives, and inclusive social activities, prepares more pupils for college than the rigid, prescribed system of the past used to prepare. The modern high school also recognizes that its prime function is to prepare the vastly larger group to enter business and industrial life upon the completion of the high school course. The difference between the traditional and the modern high school is that the former is aristocratic in its tendencies and looks to the interests of the smaller and more select group; the latter, while not neglecting the college preparatory work, places much of its emphasis upon such subjects as will fit the great majority of its pupils who may never hope to go to college, for the commercial or industrial pursuits which they will enter immediately upon leaving the high school. The ideal of the modern high school is that individual needs, interests, and aptitudes of the pupils be studied with the view of becoming the basis of the entire school organization. Then, a diversified curriculum is planned with practical and utilitarian ends in view along with the so-called cultural ones.

Since college entrance is only one of a number of its functions,

the modern high school, instead of being merely a preparatory school for college, becomes "The People's College," a school entirely democratic in its tendencies.

If we are to consider the modern point of view in adjusting the high school to the needs of the time, the question as to what are the needs, becomes eminent. Herbert Spencer says that no rational curriculum can be worked out until we decide what things are of most worth to the people whom the school is to serve.

The great number of surveys of various kinds which have been made in the last few years is but one expression of earnest educators of this country in their endeavor to find the answer to this question. To answer it thoroughly the solutions of numerous problems would have to be known, many of which at present baffle the best intellects. To illustrate this, we might mention a few of the many pressing ones, such as: "Is the curriculum of the rural high school of such a nature as to drive the boys from the farm to the city?" "To what extent do the subjects now taught function in the lives of the pupils?" "Why do pupils select the various vocations they do select?" These are but a few of the long list of problems which challenge the ability of the educators of the day, the solution of which will add very materially to the fund of knowledge of secondary education.

Although there are many big problems which seem at present extremely difficult of solution, yet a great deal has been done, and more can be done in this field. Several profitable studies have appeared during the past few years which have made valuable scientific contributions. Van Denburg's study, Elimination of Students in Public Secondary Schools, which has thrown a new light on why boys and girls leave high school before graduation, has given educators some very tangible helps and suggestions. King's High School Age is another contribution welcomed by students of secondary education. The same is true of Inglis' Principles of Secondary Education. Other special studies and surveys, too numerous to mention, have given new light and inspiration to interested students.

This study will try to determine in a measure to what extent the high school functions in the lives of its pupils. In planning this work, the writer thought it worth while to approach the

problem from the viewpoint of the pupils. With a very few exceptions, the studies and investigations that have been made along this line, have been made from the point of view of the teacher or the administrator.

In arranging the investigation, however, an endeavor was made to secure data both of a general and of a particular nature. The problem was attacked from several angles so as to get as many avenues of approach as possible, and to secure as many different reactions from the pupils as could be had. Collateral material bearing on the subject was made use of also.

In this endeavor to ascertain whether the high school is meeting modern conditions by giving its pupils that training which they are going to need in life, the writer sought, as indicated above, to learn from high school pupils themselves and from those who were formerly in high school, what is the type of community from which they come; what their plans and prospects are; what their estimation of the value of their high school education is; what additional training they need and plan to take, and where they plan to take it; why they left high school before graduation; and what estimate they place on the various subjects of the course of study. In this last division they were asked which studies they liked best; which studies they think are the most useful and least useful; which studies they should like to see added to their high school course of study; and which studies, if added to the course, would cause some of those who left high school without graduating to want to return. Some light on these and numerous similar questions, considered from the standpoint of the pupils themselves, would help us to know better the raw material with which we have to deal, and aid us materially in solving this all important question in the field of high school education.

It is not the purpose of this study to do more than open up a field of inquiry concerning the rural high school problem of Tennessee. The conclusions drawn in no sense exhaust the information contained in the tables presented. They are open for further study on the part of any one interested in the great problems of secondary education as they relate to the rural high school.

CHAPTER II

THE PRESENT STATUS OF THE AMERICAN HIGH SCHOOL

At this point it was thought advisable to present some data concerning high school conditions the country over. The purpose of this chapter therefore is twofold: first, to reinforce some statements made in the introductory chapter regarding the prevalence of high school conditions in general; and second, to present the general background of the study which follows.

When one tries, for example, to ascertain the current practices regarding the principles underlying the building of our programs of study, one is confronted with the fact that the practices are as varied as the civilization which the high schools are serving. The practices are varied primarily because they are not founded on some common underlying philosophy. In fact, there are nearly as many different ideas concerning the purpose and function of our high schools as there are schools. As a result of this all types of schools are to be found in our country. Some are rigid beyond measure, and the prevailing philosophy underlying the organization and administration of their programs of study hearken back to pre-revolutionary days. Others have swung to the other extreme. Between these extremes will be found numerous types.* All this merely shows that we of America are yet in the experimental stage as regards secondary education. The hopeful side of this is, however, that many of our prominent educational leaders are awake to the situation and are endeavoring, through numerous methods of study, investigation, and experimentation, to arrive at some common, scientific basis of procedure which will result in greater efficiency for the future. Suffice it to say that the result of such conditions is just what one would expect to find—inefficiency.

To illustrate the above statements concerning current practices in building programs of study, the writer has selected at random some high schools over the country and reproduced be-

*Monroe, Principles of Secondary Education.

low their programs of study. They will serve to illustrate the point in hand. The programs of study follow.

ILLUSTRATION A.

"We have adopted the Latin course for High Schools of first class. This course is coextensive with that offered by the leading preparatory schools throughout the South. It furnishes the best basis we have yet found for the training of pupils who have finished the primary course of study. It is chosen with a conviction that it is better to learn a few things well than to acquire a superficial knowledge of many. To the young people of the county who expect to teach it is of inestimable value. It embraces four years of Mathematics, English, History, and Latin, and three years of Greek.

"This course is the strongest allowed to be taught in——high schools. We call especial attention to the courses in English, Mathematics and the foreign languages. Too much stress can hardly be laid on any one of these."

FIRST YEAR

First Term	*Second Term*
Higher Arithmetic	High School Algebra
English	English
Beginner's Latin	Beginner's Latin
History-English	History-English
Spelling	Spelling

SECOND YEAR

First Term	*Second Term*
High School Algebra	High School Algebra
English	English
Caesar	Caesar
Greek	Greek
Spelling	Spelling

THIRD YEAR

First Term	*Second Term*
Plane Geometry	Plane Geometry
English	English
Cicero	Cicero
Greek	Greek
Spelling	Spelling

FOURTH YEAR

First Term	*Second Term*
Solid Geometry	Physics
Physics	English
English	Virgil
Virgil	Greek
Greek	Spelling

ILLUSTRATION B.

"Ample provisions have been made to meet the varied needs of those who come to school here whether they expect to attend college or go into business pursuits. The courses of study are flexible enough to meet the requirements of the state and the needs of pupils, affording sufficient opportunity for them to get a practical high school education or a well-grounded preparation for college entrance. It articulates satisfactorily with the elementary school, the two-year high school, the normal school, and standard colleges and universities. Pupils are permitted on entrance to elect the course which seems best suited to their needs."

Courses	Year			
	First Year	Second Year	Third Year	Fourth Year
Scientific	Arithmetic Algebra English Biology English Hist. Spelling	English Algebra Physiography Ancient Hist. Spelling	English Geometry French Physics Spelling	English Geometry French Chemistry American Hist. Spelling
Classical	English Arithmetic Algebra Biology Latin	English Algebra Caesar Ancient Hist. Spelling	English Geometry French Cicero Spelling	English Geometry French Virgil American Hist. Spelling

Agriculture, Home Economics and Manual Training are elective subjects.

ILLUSTRATION C.

"The work of the school has been arranged to meet the requirements of three groups of pupils: (1) Those preparing for college entrance, (2) those preparing for business, (3) those desiring a general education designed to give a broader outlook, when higher education is impossible and commercial work not desired."

Courses	Year			
	First	Second	Third	Fourth
College Preparatory	English Algebra Latin Ancient Hist.	English Plane Geom. Latin One elective	English Alg. Adv. Solid Geom. Two electives	English Three electives
Commercial	English Algebra Com. Arith. Penmanship Spelling Commercial Correspondence	English Bookkeeping Two electives	English Com. Geog. Com. Law Stenog. and Typewriting One elective	English Economics Office Dictation Stenog. Typewriting One elective
General	English Algebra Two electives	English Three electives	English Three electives	English Three electives

ELECTIVE SUBJECTS:

First Year

Phys. Geog.
Botany
Agriculture
Household Arts

Second Year

Zoology
Physiology
Agriculture
Household Arts
Med. and Mod. History

Third Year

Chemistry
Agriculture
Household Arts
Cicero or
Virgil

Fourth Year

Physics
Civics
American History
Reviews
Household Arts
Agriculture
Cicero or
Virgil

ILLUSTRATION D.

Courses	Year			
	First Year	Second Year	Third Year	Fourth Year
Classical	English Algebra Latin One elective	English Plane Geom. Latin One elective	English Solid Geom. Adv. Algebra Latin One elective	English Latin Two electives
Scientific	English Algebra Gen. Science Physiography One elective	English Plane Geom. Biology One elective	English Solid Geom. Adv. Algebra Chemistry One elective	English Trigonometry Physics Two electives
Home Economics	English Sewing Household Accounts Gen. Science One elective	English Cooking Biology One elective	English Adv. Sewing Adv. Cooking Chemistry One elective	English Household Management Home Decoration and Costume Designing Physics One elective
General	English Three electives approved by Adviser	English Three electives approved by Adviser	English Three electives approved by Adviser	English Three electives approved by Adviser
Commercial	English Penmanship Two electives	English Bookkeeping Business Eng. Spelling One elective	English Stenography Typewriting One elective	English Stenography Typewriting Arithmetic
Electives	Algebra Latin Ancient Hist. Medieval Hist. Gen. Science Physiography Mechanical Drawing Penmanship German French	Plane Geom. Latin Modern Hist. Biology Cooking Shop work Business Eng. Spelling German French	Solid Geom. Adv. Algebra Latin American History Chemistry Adv. Cooking Adv. Sewing Music German French	Trigonometry Arithmetic Latin Civics Economics Physics Household Management Home Decoration Costume Designing Music German French

ILLUSTRATION E.

"A pupil graduates when he has earned sixteen units. Of these sixteen units, three must be in English. The other subjects are chosen in consultation with the parent and the adviser."

When we turn from a study of the existing practices and conditions to a consideration of the results achieved, we are not at all surprised, since in the final analysis the results achieved are the best test of efficiency. This lack of definiteness of purpose and of clearness of ideas as to the best means by which to accomplish the desired ends result in gross inefficiency in the life and holding-power of the high school. Tables I and II below tell the story of the ineffectiveness of the high school in the lives of its pupils. Table I gives the elimination in our schools from the first grade through the high school, and table II gives the distribution of the pupils by grades in high school over a stretch of years. The tables follow:

TABLE I

PERCENTAGES IN THE DIFFERENT GRADES OF THOSE BEGINNING THE FIRST GRADE OF THE ELEMENTARY SCHOOL.*

	Per Cent Remaining				Per Cent Eliminated			
Grade	Thorndike	Ayers	Strayer	Average	Thorndike	Ayers	Strayer	Average
1	100	100	100	100	0	0	0	0
2	100	100	100	100	0	0	0	0
3	100	100	100	100	0	0	0	0
4	90	100	100	97	10	0	0	3
5	81	100	95	93	19	0	5	7
6	68	90	74	77	32	10	26	23
7	54	70	63	62	46	30	37	38
8	40	50	51	47	60	50	49	53
I	27	40	39	35	73	60	61	65
II	17	20	22	20	83	80	78	80
III	12	12	18	14	88	88	82	86
IV	8	10	14	11	92	90	86	89

*Inglis, Principles of Secondary Education. Quoted by permission of Houghton Mifflin Co.

TABLE II

PERCENTAGES OF ALL PUPILS IN THE PUBLIC SECONDARY SCHOOLS IN THE VARIOUS GRADES.*

Grades	1907-8	1908-9	1909-10	1910-11	1911-12	1912-13	1913-14	1914-15
I	43.26	43.28	42.89	42.79	41.73	40.94	40.79	40.86
II	27.16	26.88	27.10	26.73	27.08	26.94	26.74	26.69
III	17.85	17.83	17.83	17.97	18.21	18.63	18.63	18.46
IV	11.73	12.01	12.18	12.51	12.98	13.49	13.84	13.99

*Inglis, Principles of Secondary Education. Quoted by permission of Houghton Mifflin Co.

Each of the above tables tells the same story of inefficiency. When only 47 per cent of our children finish the elementary, and 11 per cent the high school, it is time to begin an inquiry as to the cause. This problem becomes still more alarming when we recognize the fact that conditions in the past have made but little improvement.

With these facts in mind to serve as a general background, let us now turn to our particular problem, which has to do with conditions in the first-class county high schools of the State of Tennessee.

CHAPTER III

THE PRESENT STATUS OF THE SOUTHERN HIGH SCHOOL

In beginning a detailed analysis of the problem of this study, it is best to set out the conditions in Tennessee as regards elimination by comparing them with those of the other twelve Southern states. In most respects the states of the South confront similar conditions and are consequently struggling with common problems.

Table III below shows: (a) elimination for the 13 Southern states; (b) elimination for Tennessee as compared with the other twelve Southern states; (c) elimination in Tennessee as compared with the entire United States; and (d) elimination for the sixty first-class county high schools of Tennessee as compared with Tennessee and other Southern states and the country as a whole.

From this table it is seen that for the country as a whole practically three-fourths of the students in the high schools are in the freshman and sophomore years. It is further seen that conditions are much worse than that, if only the Southern states are considered, for here 10.61 per cent of the pupils enrolled in the high schools are in the senior year. Tennessee, in this respect, is in a still worse condition, since 9.59 per cent reach the senior year. However, the first-class county high schools of Tennessee, as a group, rank much higher in point of attendance. They show 13.98 per cent in the senior year.

We can safely say that if we consider elimination from the point of view of the per cent of the total enrolment that is in the senior year, the Southern states as a group stand much below the United States as a whole; that Tennessee stands below the median for the Southern group; and that the first-class county high schools of Tennessee are on a par with the high schools of the country as a whole.

Since we have a general view of elimination for the State of Tennessee as compared with the other Southern States, and also with the country at large, the next questions that naturally arise are the following: Have conditions within the state im-

TABLE III

ENROLMENT* OF SECONDARY STUDENTS, BY YEARS, IN THE PUBLIC HIGH SCHOOLS OF THE THIRTEEN SOUTHERN STATES AND PERCENTAGE OF TOTAL IN EACH YEAR COMPARED WITH THE UNITED STATES AS A WHOLE, AND ALSO THE SIXTY FIRST-CLASS COUNTY HIGH SCHOOLS OF TENNESSEE.

13 Southern States	No. Schools Rep'd	Total Number of Students Reported	Ninth Grade		Tenth Grade		Eleventh Grade		Twelfth Grade	
			No.	% of Total	No.	% of Total	No.	% of Total	No.	% of Total
Virginia	295	18,691	7,820	41.84	5,131	27.45	3,409	18.24	2,331	12.47
West Virginia	115	10,010	4,217	42.13	2,722	27.19	1,769	17.67	1,302	13.01
North Carolina	249	14,305	6,452	45.10	4,094	28.62	2,572	17.98	1,187	8.30
South Carolina	149	8,292	3,453	41.64	2,614	31.53	1,817	21.91	408	4.92
Georgia	261	16,037	6,732	41.98	4,773	29.76	3,270	20.39	1,262	7.87
Florida	96	4,915	2,107	42.87	1,387	28.22	842	17.13	579	11.78
Kentucky	216	15,361	6,683	43.51	4,122	26.83	2,655	17.28	1,901	12.38
Alabama	174	13,150	5,756	43.77	3.519	26.76	2,355	17.91	1,520	11.56
Mississippi	167	10,323	4,271	41.37	3,175	30.76	1,929	18.69	948	9.18
Louisiana	116	8,940	3,827	42.81	2,459	27.50	1,719	19.23	935	10.46
Arkansas	160	11,814	5,297	44.84	3,225	27.30	2.080	17.60	1,212	10.26
Texas	490	43,420	17,071	39.31	12,491	28.77	8,676	19.99	5,180	11.93
Tennessee	180	15,987	7,381	46.17	4,364	27.30	2,708	16.94	1,534	9.59
Total	2,668	191,245	81,067	42.39	54,076	28.28	35,803	18.72	20,299	10.61
United States	11,674	1,328,984	543,026	40.86	354,705	26.69	245,380	18.46	185,873	13.99
Sixty First-Class County High Schools in Tennessee, 1915-16	56	5,946	2,335	39.32	1,567	26.35	1,213	20.35	831	13.98

*From report Commissioner of Education, 1916. Vol. II, Page 460.

proved during the past few years? Do the first-class county high schools show up any better as regards the problem of elimination than the high schools of the second* and third classes? To answer these and other similar questions, table IV, is presented. This table also shows conditions of elimination for the state as a whole beginning with the passage of the county High School Law in 1909 and continuing through the scholastic year 1915-16; it further shows the elimination of the sixty first-class county high schools for the scholastic year 1915-16.

TABLE IV

ENROLMENT OF SECONDARY STUDENTS, BY YEARS, IN ALL THE HIGH SCHOOLS OF TENNESSEE AND PERCENTAGE OF TOTAL IN EACH YEAR FROM 1909 TO 1916.*

Year	Ninth Grade		Tenth Grade		Eleventh Grade		Twelfth Grade	
	No.	% of total	No.	% of total	No.	% of total	No.	% of total
1909-10	2794	54.4	1412	27.5	641	12.7	281	5.4
1910-11	3552	53.5	1674	25.1	960	14.5	448	6.9
1911-12	3800	50.4	1979	26.2	1138	15.1	629	8.3
1912-13	4330	52.1	2078	25.0	1187	14.3	715	8.6
1913-14	4659	46.9	2666	26.8	1678	16.9	930	9.4
1914-15	5449	46.4	3057	26.0	2070	17.6	1160	10.0
1915-16	5617	44.6	3366	26.8	2188	17.4	1430	11.2
1915-16—60† first class county high schools of Tennessee	2335	39.3	1567	26.4	1213	20.4	831	13.9

*This table was derived from the biennial reports of State Department of Education of Tennessee from 1909 to 1916.

†Only 56 schools included in these figures.

After studying the above table carefully, we can make a few general statements regarding elimination in Tennessee high schools. One is that the problem is much worse and much more

*The biennial reports of the State Department of Education of Tennessee do not give the elimination figures for each class of high schools, but for all the high schools of the state together, and for that reason a separate study can not be made of elimination in these first-class county high schools. It would be a profitable study if we could make a comparison of the holding power of the first, second and third classes of county high schools of the state. Since the material for that study is not available, the writer used a blank to get the elimination for the first class county high schools, for one year, for comparative purposes.

serious for the high schools of the second and third classes than it is for those of the first-class. Another one is that conditions for the state as a whole have improved since 1909. This statement, however, has to be considered in the light of the fact that this stretch of seven years covers a transitional period, or rather a formative period in the life of the high schools of the state. Although table IV shows a very great increase in the six years, in many cases whole schools were taken over bodily and converted into high schools. Hence, the table does not represent the steady growth in high school attendance.

After having determined the relation these sixty first-class county high schools of Tennessee bear to the other high schools of the state, to the other Southern states, and to the country as a whole, we are now ready to ascertain a few details regarding these particular high schools. To understand fully the problem of elimination in these high schools, it is necessary to know first, in what month during the year the pupils left high school; second, how many months they attended before leaving; and third, what grade they finished.

This information is essential, for it makes a big difference whether pupils leave high school at stated intervals when certain units of work have been completed, or whether they drop out promiscuously all along through the school year. To ascertain these facts, tables V, VI and VII are presented. Let us now turn to a consideration of these tables.

TABLE V

MONTH DURING WHICH THE QUITTERS LEFT HIGH SCHOOL.*

Boys.....285
Girls.....155

Total.....440

Month	Boys		Girls		Total	
	No.	%	No.	%	No.	%
Blank	49	17.2	21	13.7	70	17.0
September	7	2.5	9	5.9	16	3.7
October	14	4.9	7	4.6	21	4.8
November	30	10.5	13	8.5	43	9.9
December	30	10.5	17	11.1	47	10.8
January	19	6.7	8	5.2	27	6.2
February	23	8.1	5	3.2	28	6.4
March	26	9.1	7	4.6	33	7.6
April	27	9.5	16	10.4	43	9.9
May	57	20.0	48	31.2	105	24.2
June	3	1.1	4	2.6	7	1.6

*The data for this table were derived from the questionnaires filled by the quitters.

TABLE VI

THE NUMBER OF MONTHS THE QUITTERS ATTENDED HIGH SCHOOL.*

Boys.....285
Girls.....155

Total 440

Number of Months	Boys		Girls		Total	
	No.	%	No.	%	No.	%
Blank	17	5.9	13	8.5	30	6.9
1	11	3.8	2	1.3	13	2.9
2	14	4.9	1	.7	15	3.5
3	14	4.9	2	1.3	16	3.7
4	7	2.5	6	3.9	13	2.9
5	9	3.1	1	.7	10	2.3
6	3	1.0	5	3.2	8	1.8
7	6	2.2	2	1.3	8	1.8
8	7	2.4	7	4.5	14	3.2
9	28	9.8	17	11.1	45	10.4
10	5	1.7	0	0	5	1.2
11	4	1.4	1	.7	5	1.2
12	7	2.4	4	2.6	11	2.5
13	7	2.4	2	1.3	8	1.8
14	1	.4	3	1.9	4	.9
15	13	4.5	5	3.2	18	4.1
16	5	1.7	1	.7	6	1.4
17	2	.7	0	0	2	.5
18	33	11.5	20	13.0	53	12.2
19	4	1.4	3	1.9	7	1.6
20	3	1.0	8	5.2	11	2.5
21	6	2.1	5	3.2	11	2.5
22	9	3.1	3	1.9	12	2.8
23	5	1.7	3	1.9	8	1.8
24	4	1.4	3	1.9	7	1.6
25	5	1.7	1	.7	6	1.4
26	1	.4	4	2.6	5	1.2
27	22	7.7	18	11.7	40	9.2
28	1	.4	0	0	1	.2
29	0	0	4	2.6	4	.9
30	8	2.8	2	1.3	10	2.3
31	4	1.4	3	1.9	7	1.6
32	1	.4	0	0	1	.2
33	5	1.7	1	.7	6	1.4
34	1	.4	0	0	1	.2
35	5	1.7	1	.7	6	11.4
36	8	2.8	4	2.6	12	2.8

*The data for this table were derived from the questionnaires filled by the quitters.

TABLE VII

GRADES COMPLETED IN THE HIGH SCHOOL BY THE QUITTERS.*

Boys.....285
Girls.....155

Total 440

Grade	Boys		Girls		Total	
	No.	%	No.	%	No.	%
Blank	35	12.3	13	8.5	48	11.0
Not any	73	25.6	22	14.3	95	21.9
Ninth	74	25.9	49	31.9	123	28.3
Tenth	67	23.5	51	33.1	118	27.1
Eleventh	36	12.7	20	13.0	56	12.9

*The data for this table were derived from the questionnaires filled by the quitters.

If we combine the totals for those who left these first-class county high schools in December, May, and June, we have 36.6 per cent of the total quitters leaving at either the middle or the end of the school year. The other 63.4 per cent leave at irregular intervals during the year.

Again, if we combine the totals of those who left at the end of the year (those who attended nine, eighteen, twenty-seven, or thirty-six months) and thus rounded out one or more full school years of work, we have only 34.6 per cent of the entire group.

These two facts show the great need of some form of the cycle system as it is found in many of the secondary schools of Europe. Some provision should be made whereby a high school pupil could do one or two or three years of work and leave school with a definite, complete, rounded out unit of work done. If this were instituted and properly emphasized, it should be a means of holding more pupils in high school until they will have reached some certain arranged breaks which would allow them to leave with the greatest amount of good accomplished.

However, a close study of tables V and VI will show that the pupils under the present system with no special inducements to complete any cycle of work actually approximate in a way the very thing desired. That is to say, more pupils leave during the months of December and May than during any other months of the year, and more pupils attend nine, eighteen, and twenty-

seven months (one, two and three years) than any other number of months. This condition then furnishes the basis for the adjustment of the high school as suggested.

Before passing to the next chapter, which outlines in detail the method employed in investigating the services rendered the State of Tennessee by its first-class county high schools, let us summarize chapters II and III. This will enable us to simplify the problem in hand. We conclude as follows:

1. Out of every 100 children who enter the first grade of our public schools only 11 finish the senior year of high school.
2. Practically three-fourths of all high school students are in the freshman and sophomore years.
3. Elimination for the South is much heavier than for the states of the other sections of the country.
4. As regards elimination Tennessee stands in the lower half of the states composing the Southern group.
5. Elimination is much heavier in Tennessee for the county high schools of the second and third classes than it is for those of the first-class.
6. As regards elimination the first-class county high schools of Tennessee stand on a par with the high schools of the country as a whole.
7. Elimination the country over has made but little improvement during the past decade or so.
8. As regards elimination for the sixty first-class county high schools of Tennessee we can say
    a. That the pupils do not leave high school at any regular stated intervals (in other words, that about two-thirds of those who quit, drop out at odd times through the school year);
    b. That the largest groups leave during the months December and May;
    c. That about two-thirds of those who leave do not attend any regular number of months or complete any definite unit of work;
    d. That about one-third do not finish even the freshman year in the high school;
    e. That over one-half of all the pupils who enter are gone by the end of the second year, and practically three-fourths are gone by the end of the third year.

9. That as regards the building of programs of study for high schools we of America are yet in the experimental stage.

We are now ready to begin an intensive study of our problem. Let us turn next to a consideration of the method of approach.

CHAPTER IV

THE METHOD OF THIS INVESTIGATION

This dissertation on the Function of Secondary Education is a part of the secondary section of the State Educational Survey of Tennessee which the Bureau of Education is carrying on at the request of the State Department. As was stated in the first chapter most of the data for this study were secured from the pupils themselves by the aid of the high school principals. In casting about for representative groups, the writer finally decided that pupils from the first-class county high schools would be the most representative group on which to base a study. At the time (February, 1916), there were 61 standardized first-class county high schools in Tennessee, scattered pretty well over the state. In selecting this group to study it was the thought also that the facts gathered would be representative of the best phase of the rural high schools throughout the South as well as throughout the State of Tennessee.

The locations of the schools and the nature of the material desired each necessitated the use of the questionnaire method. To that end, three questionnaires were prepared: one for the seniors in these 61 first-class county high schools; one for the previous year graduates; and one for the pupils who had dropped out within the last three years without graduating.

In order to secure the names of the graduates and those who had left before graduation, two blanks were prepared and sent to the principals to be filled and returned. On February 15, 1916, a letter was sent to each of the principals of these sixty-one first-class county high schools containing the two blanks just mentioned, an enrolment blank, one questionnaire blank to be filled by each senior in high school, and a letter of instructions. In order that the reader may have a clear conception as to exactly how these data were secured, the letter to be the principals together with all blanks sent are here reproduced.

DEPARTMENT OF THE INTERIOR

Bureau of Education
Washington

Peabody College Sub-Station,
February 15, 1916.

Principal .....
..... Co. High School,
....., Tenn.

My Dear Mr. .....:

Professor Harry Clark, Inspector Wm. R. Bourne, and I have charge of the investigation of the secondary schools of Tennessee, which is a part of the survey of the state undertaken by the United States Bureau of Education at the request of the State Department. *We are inviting your cooperation in this study.*

One of the most important problems which confronts high school men and women all over the United States is whether or not we are giving our pupils that which they are going to need. *Does the high school,* in other words, *meet modern conditions?*

To this end, we are trying to learn from high school students themselves and from those who were formerly in high school, what their plans and prospects are, what their estimate of the value of their high school education is, and what additional training they had to get. The answers received will help us to know the raw material, with which we have to deal.

Your *Senior Class* is the easiest group to find. Will you please have them answer the enclosed questionnaire? The other blanks (enclosed) are to help us find with your aid, the names and addresses of your graduates of last June and of other boys and girls who have dropped out within the last three years, that we may mail them questionnaires and secure information from them.

This is an expensive investigation. It takes your time and ours. Printing and postage are expensive. Will you not give us your heartiest cooperation? Without it the whole investigation must fail.

We need your help right away. We cannot send out the other letters until we hear from *each progressive school.* The government envelope (enclosed) will carry the material to us without postage. Just paste it on the package.

May we hear from you this week?

Faithfully yours,

WM. F. RUSSELL,
Professor of Secondary Education.

INSTRUCTIONS

The Principal

We want your assistance in the following ways:

(1) On the first blank will you please give us your enrolment in each class for last September?

(2) On the second blank will you please give us the names of as many pupils as you can remember who have dropped out of your high school within the last three years, about whom you also know the present address and occupation. If you do not know their occupation, and why they quit school, be sure to give the name and address (or parent's address) as it is very essential that we get them for further use?

(3) On the third blank will you please give us the name, present address, and present occupation of the graduates of last June from your school?

(4) Will you see that each senior in high school answers as honestly and frankly as possible the enclosed questionnaire? It would be better if you would gather them all together in one room and have them answer it, impressing them with the fact that it is Government business.

(5) Place all the material together under one cover and return it in the enclosed addressed envelope. If the envelope is not large enough to enclose the material just paste it on the outside of the bundle and send it on without any extra stamp. The Government stamp will carry the bundle regardless of its size.

To the Principal:

Please fill this blank concerning the pupil enrolment for the month of September, 1915:

By Classes

Freshmen (Or 9th. Grade).....
Sophomores (Or 10th. Grade).....
Juniors (Or 11th. Grade).....
Seniors (Or 12th. Grade).....
Name of School..... Town.....
County ..... Date.....
Principal.....

United States Bureau of Education. Peabody College Sub-station.

FOR SENIORS IN HIGH SCHOOL.

Instructions. Please fill this blank as completely as possible, stating plain facts. The information will be used as a part of the government survey of the high schools of Tennessee. Your name will appear nowhere in this study and your answer will be confidential. Remember that this is government business.

1. What is your father's occupation?.....
2. What do you plan to do for a living when you graduate?.....
3. What further training beyond high school will you need for this chosen occupation? .....

		(Check)		(Check)
Where do you plan to get it?	University		Business school.....	
	College		Correspondence school.....	
	Normal school.....		Any other way.....	

What .....

4. Name in the order of importance the three courses in your high school that will be of the greatest value to you in this chosen occupation; likewise the three of least value to you.

Courses Most Valuable.	Courses Least Valuable.
(1).....	(1).....
(2).....	(2).....
(3).....	(3).....

5. What subjects would you like to see added to your high school course?

Subjects.	Subjects.
(1).....	(3).....
(2).....	(4).....

6. If you have any brothers or sisters who at least entered high school, will you please answer the following questions concerning them:

(a) Older brother..... or Older sister..... (Check which) — Why did he or she quit school?..... First occupation after leaving high school?.. Present occupation? ....

(b) Older brother..... or Older sister..... (Check which) — Why did he or she quit school?..... First occupation after leaving high school?.. Present occupation? ....

(c) Older brothers.... or Older sisters..... (Check which) — Why did he or she quit school?..... First occupation after leaving high school?.. Present occupation? ....

Name ..... Sex.....

UNITED STATES DEPARTMENT OF THE INTERIOR
BUREAU OF EDUCATION
PEABODY COLLEGE SUB-STATION
NASHVILLE, TENNESSEE.

To the Principal:

The following blank is to be used for last year's graduates. Please fill it out as accurately as possible and return to the writer at your earliest convenience.

No.	Name	Present Address	Occupation

Name of School.....Town.....County.....

State..... Date..... Principal.....

UNITED STATES DEPARTMENT OF THE INTERIOR
BUREAU OF EDUCATION
PEABODY COLLEGE SUB-STATION
NASHVILLE, TENNESSEE.

To the Principal:

Please give us the information called for in the following blank. If you cannot say why the student quit high school, or what his occupation is, be sure to give his name and address. However, the other information is of great importance, and we trust that you will endeavor to secure a complete report of each pupil.

No.	Name	Address	Occupation	Why Quit School

Name of School.....Town.....County.....

State..... Date..... Principal.....

RESPONSES OF PRINCIPALS

Sixty of the sixty-one principals gave their hearty co-operation in the study and responded immediately. Only in a few instances was a second letter necessary to get some of the desired information omitted in the first reply.

The blanks containing the names and addresses of the graduates and quitters having been received, the writer's next move was to send a questionnaire to each graduate and each quitter whose name had been furnished by the principals. After about twenty days a follow-up letter was sent to those of each group who had not responded. Then, after about another twenty days a second follow-up letter was sent to those of both groups who had not yet responded to either of the two other letters. Below are the questionnaires and follow-up letters sent to the graduates and quitters individually.

UNITED STATES DEPARTMENT OF THE INTERIOR
BUREAU OF EDUCATION

PEABODY COLLEGE SUB-STATION
NASHVILLE, TENN.

April 15, 1916.

To the 1915 High School Graduates of Tennessee:

At the request of State Superintendent Sherrill, the United States Bureau of Education is gathering some facts concerning the schools of Tennessee.

Since you are a recent graduate of high school, we feel that your opinion of the work done there will be of great help to us in the study of the high school section. We would like very much, if possible, to see the situation from your point of view and feel sure that, as a former graduate and one interested in better schools for Tennessee, you will gladly help us. To this end we want you to answer some questions for us. From the answers to these questions, coming from all the graduates of last June, we hope to know more about the high school and how to better adapt it to the needs of the Tennessee boys and girls.

Take a pen, sit down, and answer these questions right away. If you put it off, you will forget it, and we want very much to hear from you. According to Government regulations, your name will appear nowhere in public and your answers will be treated strictly confidentially.

Fold this sheet, put it in the enclosed addressed envelope, and mail it to-day. It is National Government business, and you do not need to use a stamp.

This is expensive business. We are writing to every high school

graduate of last June in the State. Please DO IT NOW! **We want to hear from every one.**

Very truly yours,
Wm. F. Russell, Special Collaborator.

---

(1) What is your father's occupation?.....

(2) What are you doing at present?.....Is this to be your life work?.....If not, what do you plan to do ultimately?.....

(3) What further training do you need as preparation for your life work?.....Where do you plan to take this?.....

(4) Are you any better off, in any way, than a person who never went to high school? As a result of your high school education do you get:

	(Check)		(Check)
(a)	A better salary?.....	(d)	Better social standing?.....
(b)	Shorter hours of work?...	(e)	Better prospects? .....
(c)	A higher class of work?...	(f)	Better chances of promotion?

Explain at length any other way you are better off.....
.....

(5) Name in the order of their importance the three studies you took while in the high school that have been of the most use to you since leaving school; the three that have been of the least use to you.

	Studies Most Useful		Studies Least Useful
(a)	.....	(a)	.....
(b)	.....	(b)	.....
(c)	.....	(c)	.....

(6) If you had your way, what subjects would you like to see added to your high school course?
(a)..... (b)..... (c)..... (d).....

(7) Name in the order of their importance the three subjects you took while in the high school that you liked the best.
(a)..... (b)..... (c).....

---

(8) If you had any older brothers or sisters who at least entered high school, will you please answer the following questions concerning them?

(For one person) (a) Sex.....
- Why did he or she quit school?.....
- First occupation after leaving school?.....
- Present occupation? .....

(For one person) (b) Sex.....
- Why did he or she quit school?.....
- First occupation after leaving school?.....
- Present occupation? .....

(For one person) (c) Sex.....
- Why did he or she quit school?.....
- First occupation after leaving school?.....
- Present occupation? .....

Name..... Sex.....
Address .....

UNITED STATES DEPARTMENT OF THE INTERIOR
BUREAU OF EDUCATION
PEABODY COLLEGE SUB-STATION
NASHVILLE, TENNESSEE

May 8, 1916.

Dear Friend:*

On the fifteenth of April I mailed you a letter asking you some questions concerning your work while in the High School. A similar letter was sent to every High School Graduate of last June in the State of Tennessee. So far I have not heard from you. I am sure you do not realize the importance that is attached to your reply. The success of the undertaking depends upon you.

The many prompt replies that I have received evidence the keen interest that the High School Graduates have in making the High Schools of Tennessee more efficient. To show you that I am still depending on you, I am enclosing you another copy of the blank sent you before, for you to fill and return to me. You will attend to this at once I am sure.

Take a pen or a pencil and do it right now, for if you lay it aside you will forget about it, as you did before, and we are anxious to hear from you.

May we have an answer by return mail?

Respectfully yours,
WM. F. RUSSELL, Special Collaborator.

*Follow-up letter to graduates.

UNITED STATES DEPARTMENT OF THE INTERIOR
BUREAU OF EDUCATION
PEABODY COLLEGE SUB-STATION
NASHVILLE, TENN.

April 15, 1916.

Dear Friend:*

At the request of State Superintendent Sherrill, the United States Bureau of Education is gathering some facts concerning the schools of Tennessee.

In looking over the enrolment of students in the high schools of the State we find that a large per cent of the students quit school before they graduate. Since you are one of this number, we feel that you can be of great assistance to us in finding out why this is. To that end we want you to answer some questions for us. From your answer we hope to find out why it is that Tennessee boys and girls quit school before graduation and how we can improve the schools in the future better to suit needs such as yours.

We trust you will give us your hearty co-operation in this work, as it is being done at a very great cost of labor, time, and printing. Take a pen or pencil, sit down, and answer these questions right away. If you put it off, you will forget about it, and we want to hear from you.

After answering the questions fold this sheet, put in the enclosed

*Questionnaire sent each quitter.

addressed envelope, and mail it to-day. It is National Government business, and you do not need to use a stamp.

Thanking you for an immediate response by return mail, I beg to remain

Yours very truly,

PLEASE DO IT NOW. Wm. F. Russell, Special Collaborator.

---

(1) What is your father's occupation?.....
(2) What do you do for a living?.....
(3) How much do you make per week?..... In case you receive no salary, how much would it cost a week to hire some one to do your work?..... Does this include room and board?.....
(4) Why did you quit school?.....
(5) At what date did you quit?.....Day.....Month..... Year.
(6) How long did you attend high school?.....Years.....Months.
(7) What grade did you complete in the high school?.....Grade.
(8) Name in the order of their importance the three subjects that you took while in the high school that you liked the best.
(a)..... (b)..... (c).....
(9) What subjects added to your high school course, other than those you had a chance to take, would cause you to want to go back? Name them.
(a)..... (b)..... (c)..... (d).....
(10) Under what other conditions would you go back to high school?..
.....
(11) Are you worse off in any way than one who has graduated from the high school? As a result of not being a high school graduate do you get:

	(Check)		(Check)
(a) A lower salary?		(d) Lower social standing?	
(b) Longer work hours?		(e) Poorer prospects?	
(c) A lower class of work?		(f) Poorer chances of promotion?	

Explain at length any other way you are worse off.....
.....
(12) In what ways are you better off than if you had graduated?.....
.....
(13) Name in the order of their importance the three studies you took while in the high school that have been of most use to you since leaving school; the three least useful.

Studies Most Useful	Studies Least Useful
(a).....	(a).....
(b).....	(b).....
(c).....	(c).....

---

(14) If you had any older brothers or sisters who at least entered high school, will you please answer the following questions concerning them?

(For one person) { Why did he or she quit school?.....
First occupation after leaving school?.....
(a) Sex..... { Present occupation? .....

(For one person) { Why did he or she quit school?.....
First occupation after leaving school?.....
(b) Sex..... { Present occupation? .....

(For one person) { Why did he or she quit school?.....
First occupation after leaving school?.....
(c) Sex..... { Present occupation? .....

Name..... Sex.....
Address .....

UNITED STATES DEPARTMENT OF THE INTERIOR
BUREAU OF EDUCATION
PEABODY COLLEGE SUB-STATION
NASHVILLE, TENNESSEE

May 8, 1916.

Dear Friend:*

On the fifteenth of April I mailed you a letter asking you why you quit school before you graduated.

I mailed out over a thousand of these letters and have had many prompt replies, but I have not heard from you. We need your answer too; it will add greatly to the value of the study we are making.

You who have quit are the only ones who can help us work out why only one in six, who enter High School, ever graduate. We are depending on you. You will help us we are sure. Even though it will never effect your school career you are willing to do it, I am sure, for the good of the thousands of boys and girls who are yet to enter High School. Consequently we are again asking you to do so by filling the enclosed blank and returning it to us at the earliest moment.

May we have an answer by return mail?

Respectfully yours,
WM. F. RUSSELL, Special Collaborator.

*Follow-up letter to quitters.

UNITED STATES DEPARTMENT OF THE INTERIOR
BUREAU OF EDUCATION
PEABODY COLLEGE SUB-STATION
NASHVILLE, TENNESSEE

Dear Friend:*

We have sent you two addressed government envelopes which are valuable. If for any reason you do not intend to answer please return the envelopes for further use in the work. However, an answer would be greatly appreciated.

Respectfully yours,
WILLIAM F. RUSSELL, Special Collaborator.

*This same follow-up letter was sent to both graduates and quitters.

Groups Studied

In order to understand the implications drawn from this study and also the statistical treatment used, it is necessary to set forth the details of each group studied.

Seniors (815)

Although Table XXXI shows that there were 899 seniors in these sixty first-class county high schools who graduated, only 815 answered questionnaires. The difference is due to the fact that on the day this questionnaire was answered, these 84 pupils were either absent from school or failed to answer one. The absentees were scattered pretty evenly over the schools studied.

Graduates (575)

The term "Graduate" is used in this study to mean the 575 pupils who were graduated in these first-class county high schools the year previous. 388 of these graduates (67.48 per cent) responded to the letters sent to them by filling a questionnaire and returning it. This high per cent of answers and the fact that they are all well distributed over all the sixty schools make the answers, on the whole, satisfactory, and it is the writer's belief that a larger per cent of returns would not have very materially influenced the present results.

Quitters (972)

The word "quitter" is used to designate those pupils who left high school without graduating. The principals reported a total of 972 names and addresses, but when individual letters were sent to these quitters containing questionnaires, 63 were returned stamped "uncalled for." Omitting the 63 whom we could not reach by mail, we have 909 remaining. Of these 909 communicated with, 440 (48.4 per cent) responded by filling a questionnaire and returning it. Again it seems to the writer that responses from approximately half of the group communicated with, scattered pretty evenly over all the schools, make a satisfactory basis for study, and that a higher per cent of returns

would not have influenced very much the results herein presented.

Older Brothers and Sisters (903)

In all, 903 older brothers and sisters were reported. These data were gathered from three sources; namely, seniors, graduates, and quitters. At the bottom of each of the questionnaires, provision was made to ascertain data concerning the older brothers and sisters who, at least, had entered high school.

For obvious reasons these older brothers and sisters were classified and tabulated in two groups; namely,

Older Brothers and Sisters Who Graduated (346);

Older Brothers and Sisters Who Did Not Graduate (557).

Three Groups of Fathers (1643)

A. Seniors' Fathers 815.

B. Graduates' Fathers 388.

C. Quitters' Fathers 440.

In each instance these data, too, were given directly by the pupils themselves.

Arrangement of Tables

The writer's intention throughout was to use the government classification of occupations, but this for many reasons seemed impossible, and consequently, a special scheme has been devised which adapts itself better to the material in hand. However, when it was possible, the government classification was used as a basis in devising the scheme used.

Per Cents Used in Tables

In most instances, the per cents used in the tables were not carried further than one decimal place and in each instance the decimal of the nearest tenth was used.

Possibility of Errors

The writer is conscious of the fact that there are possibilities of some overlapping in the groups studied. For example, some of the older brothers or sisters who did not graduate may repre-

sent some of the quitters; or some of the fathers reported by the quitters may, in a few instances, be the same fathers reported by some of the older brothers or sisters who did not graduate. Again, there is a possibility of duplication as regards the graduates and older brothers and sisters who graduated. The writer foresaw this trouble of duplication, but was unable to avoid it and felt that the trouble was not of sufficient import to change the study materially.

Of course, the most scientific and accurate way to have done would have been to follow one class or group in high school closely through a number of years rather than take a cross section of a number of groups, but such a procedure would have been impossible. As a matter of expediency, the writer, though conscious of its shortcomings, chose the latter course.

Again, the writer is conscious of the fact that there is always a danger of getting some frivolous or evasive answers when dealing with people of the high school age, but the returns for this study were as free from this trouble as could possibly be expected. In fact, only one questionnaire (filled by a quitter) came back with nonsensical answers. This paper was thrown aside. Finally, the writer is conscious of the fact that there is a great deal of criticism concerning the reliability of this method of securing data. This criticism may hold in many instances, but since there is such a unity of opinion among the various groups of pupils concerning high school conditions, as this study has shown, the writer is willing to submit it as a fair means of obtaining these facts concerning the high school.

CHAPTER V

VOCATIONAL OPPORTUNITIES OF PUPILS IN TENNESSEE COUNTY HIGH SCHOOLS.

Perhaps there is no better way of determining the vocational opportunities of the high school population of the first-class county high schools of Tennessee than by making a study of the vocations of the patrons who are its supporters, together with a study of the occupations of the various groups who have at one time or other attended these high schools.

The necessity for knowing the vocational opportunities is very apparent, for, in order that a high school may function to the best advantage in the lives of its pupils, it is necessary for those who administer the school to find out the controlling activities of that community. It goes without saying that the controlling activities of a community are evolved from the natural resources of the community, and should become the organizing principle around which the course of study of the high school is built.

When viewed from this angle, the matter seems to be comparatively simple. For example, if all the fathers of a community were farmers, and if we knew that all the sons were to be farmers too, then the problem of a high school education would be a simple matter. It is not likely, however, that such a condition exists in the entire United States or in any part of it, on account of our complex civilization. Tables VIII-XII are presented below for the express purpose of ascertaining the dominant vocations of the communities which support these high schools. Let us turn now to a consideration of these tables.

TABLE VIII

PRESENT OCCUPATIONS OF GRADUATES*

Boys.....256
Girls.....319

Total 575

	Boys		Girls		Total	
	No.	%	No.	%	No.	%
Blank	5	2.1	55	17.1	60	10.2
Dead	0	0	1	.3	1	.2
	5	2.0	56	17.6	61	10.4
Federal or City Employee						
Ass't county official	1	.4	0	0	1	.2
Ass't postmaster	0	0	1	.3	1	.2
Mail carrier	1	.4	0	0	1	.2
	2	.8	1	.3	3	.5
Artisans						
Blacksmith	1	.4	0	0	1	.2
Brickmason	1	.4	0	0	1	.2
Electrician	1	.4	0	0	1	.2
	3	1.2	0	0	3	.5
Transportation						
Telegrapher	1	.4	0	0	1	.2
Transfer man	1	.4	0	0	1	.2
	2	.8	0	0	2	.3
Clerical Assistants						
Bookkeeper	10	4.0	1	.3	11	1.8
Clerk	14	5.6	6	1.8	20	3.5
Stenographer	0	0	3	.9	3	.5
	24	9.6	10	3.1	34	5.8
Manufacture and Trade						
Cotton business	1	.4	0	0	1	.2
Merchant	3	1.2	0	0	3	.5
Salesman	2	.8	0	0	2	.3
	6	2.4	0	0	6	1.1
Teaching						
Teaching	26	10.4	76	23.6	102	17.3
Consolidated school	1	.4	0	0	1	.2
Graded school	0	0	4	1.2	4	.7
High School	0	0	1	.3	1	.2
Rural school	5	2.0	7	2.2	12	2.0
Tutoring	0	0	1	.3	1	.2
Music	0	0	3	.9	3	.5
	32	12.8	92	28.5	124	21.6

*The data for this table were secured from the principals of these sixty first-class county high schools.

TABLE VIII (Continued)

	Boys		Girls		Total	
	No.	%	No.	%	No.	%
Unclassified						
Ball pitcher	2	.8	0	0	2	.3
Reporter	1	.4	1	.3	2	.3
	3	1.2	1	.3	4	.7
In school						
Business college	7	2.8	2	.6	9	1.5
College	35	14.0	35	10.6	70	12.0
Conservatory of music	0	0	1	.3	1	.2
Naval academy	2	.8	0	0	2	.3
Polytechnic	2	.8	0	0	2	.3
Post graduate	14	5.6	13	4.1	27	4.6
State normal	9	3.6	25	7.6	34	5.8
Music at home	0	0	6	1.8	6	1.1
Private teacher at home	0	0	4	1.2	4	.7
University	44	17.6	18	5.6	62	10.5
	113	45.1	104	32.2	217	38.8
At home						
At home	4	1.6	13	4.0	17	2.7
Keeping house	0	0	38	11.7	38	6.6
Married	0	0	4	1.2	4	.7
	4	1.6	55	16.9	59	10.3
Farmer	47	18.8	0	0	47	6.6
Day laborer						
Working in	8	3.2	0	0	8	1.4
Factory	1	.4	0	0	1	.2
Machine shop	2	.8	0	0	2	.4
Mill	3	1.2	0	0	3	.5
Orange orchard	1	.4	0	0	1	.2
	15	6.0	0	0	15	2.7

TABLE IX

PRESENT OCCUPATIONS OF OLDER BROTHERS AND SISTERS*

Boys.....508
Girls.....395

Total.....903

	Boys		Girls		Total	
	No.	%	No.	%	No.	%
Blank	26	5.2	77	19.3	103	11.4
Dead	0	0	1	.3	1	.1
	26	5.2	78	19.6	104	11.5
Professional						
Civil engineer	2	.4	0	0	2	.2
Dentist	2	.4	0	0	2	.2
Doctor	9	1.8	0	0	9	1.0
Lawyer	8	1.6	0	0	8	.9
Minister	2	.4	0	0	2	.2
Trained nurse	0	0	5	1.3	5	.6
	23	4.6	5	1.3	28	3.1
Semi-professional						
Chemist	1	.2	0	0	1	.1
Commercial artist.	1	.2	0	0	1	.1
Draftsman	1	.2	0	0	1	.1
Druggist	3	.6	0	0	3	.3
Surveyor	1	.2	0	0	1	.1
Journalist	3	.6	0	0	3	.3
	10	2.0	0	0	10	1.1
Federal and City Employee						
Assistant Postmaster	2	.4	0	0	2	.2
Civil service	9	1.8	0	0	9	1.0
County official	3	.6	0	0	3	.3
Mail service	5	1.0	0	0	5	.5
U. S. army	5	1.0	0	0	5	.5
U. S. navy	5	1.0	0	0	5	.5
	29	5.8	0	0	29	3.2
Artisans						
Carpenter	4	.8	0	0	4	.4
Plasterer	2	.4	0	0	2	.2
Plumber	2	.4	0	0	2	.2
Tinner	3	.6	0	0	3	.3
Decorator	3	.6	0	0	3	.3
Electrician	4	.8	0	0	4	.4
	18	3.6	0	0	18	2.0

*The data for this table were secured from the seniors, graduates and quitters.

TABLE IX (Continued)

	Boys		Girls		Total	
	No.	%	No.	%	No.	%
Transportation						
Chauffeur	1	.2	0	0	1	.1
Expressman	4	.8	2	.5	6	.6
Garage owner	1	.2	0	0	1	.1
Railroader	20	4.0	1	.3	21	2.1
Street railway employee	5	1.0	0	0	5	.5
Telegrapher	4	.8	1	.3	5	.5
	35	7.0	4	1.1	39	4.3
Clerical Assistants						
Bookkeeper	38	7.6	8	2.0	46	4.9
Clerk	49	9.8	5	1.3	54	5.8
Stenographer	7	1.4	14	3.5	21	2.1
Timekeeper	3	.6	0	0	3	.3
	97	19.4	27	7.0	124	13.6
Personal Service						
Barber	1	.2	0	0	1	.1
Hotel proprietor	1	.2	0	0	1	.1
Waiter	1	.2	0	0	1	.1
	3	.6	0	0	3	.3
Middlemen (office workers)						
Cotton broker	2	.4	0	0	2	.2
Insurance agent	3	.6	0	0	3	.3
Real estate	3	.6	0	0	3	.3
	8	1.6	0	0	8	.9
Manufacture and Trade						
Amateur vender	1	.2	0	0	1	.1
Business	2	.4	0	0	2	.2
Butcher	1	.2	0	0	1	.1
Contractor	4	.8	0	0	4	.4
Engineer	3	.6	0	0	3	.3
Florist	1	.2	0	0	1	.1
Foreman	4	.8	0	0	4	.4
Lumber	3	.6	0	0	3	.3
Merchant	20	4.0	0	0	20	2.2
Mgr. Cement Co.	1	.2	0	0	1	.1
Marble works	1	.2	0	0	1	.1
Mechanic	11	2.2	0	0	11	1.2
Miller	1	.2	0	0	1	.1
Milliner	0	0	3	.8	3	.3
Oil	1	.2	0	0	1	.1
Produce business	1	.2	0	0	1	.1
Seamstress	0	0	1	.3	1	.1
Shipping clerk	7	1.4	0	0	7	.8
Tobacconist	2	.4	0	0	2	.2
With Optical Co.	1	.2	0	0	1	.1
	65	13.1	4	1.0	69	7.6

TABLE IX (Continued)

	Boys		Girls		Total	
	No.	%	No.	%	No.	%
Teaching						
Teaching	14	2.8	97	24.5	111	12.3
Domestic science	0	0	3	.8	3	.3
Music	0	0	6	1.5	6	.6
In high school	2	.4	1	.3	3	.3
Principal high school	3	.6	2	.5	5	.5
Librarian	0	0	1	.3	1	.1
Athletic coach	1	.2	1	.3	2	.2
	20	4.0	111	28.2	131	14.4
Unclassified						
In orphans home	1	.2	0	0	1	.1
Linotype man	1	.2	0	0	1	.1
Reporter	2	.4	0	0	2	.2
Traveling	1	.2	0	0	1	.1
Undertaker	1	.2	0	0	1	.1
County agent	1	.2	0	0	1	.1
	7	1.4	0	0	7	.8
In school						
Business college	2	.4	3	.8	5	.5
College	6	1.2	18	4.5	24	2.6
In school	2	.4	2	.5	4	.4
Medical college	3	.6	0	0	3	.3
Normal school	3	.6	2	.5	5	.5
Private school	1	.2	0	0	1	.1
Studying art	0	0	1	.3	1	.1
Studying expression	0	0	1	.3	1	.1
Studying in Italy	1	.2	0	0	1	.1
Studying law	6	1.2	0	0	6	.6
Studying music	0	0	1	.3	1	.1
Training for nurse	0	0	2	.5	2	.2
University	19	3.8	3	.8	22	2.4
Veterinary college	1	.2	0	0	1	.1
	44	8.8	33	8.5	77	8.4
At home						
Housekeeper	0	0	78	19.8	78	8.4
Married	0	0	51	12.8	51	5.6
Ill at home	1	.2	0	0	1	.1
	1	.2	129	32.6	130	14.3
Farmer						
Farmer	106	21.4	0	0	106	11.6
Poultry farmer	2	.4	0	0	2	.2
	108	21.8	0	0	108	11.8
Day laborer						
Day laborer	5	1.2	4	1.0	9	1.0
In laundry	1	.2	0	0	1	.1
In coal mines	4	.8	0	0	4	.4
In printing office	3	.6	0	0	3	.3
On government dredge	1	.2	0	0	1	.1
	14	2.8	4	1.0	18	2.0

TABLE X

PRESENT OCCUPATIONS OF QUITTERS*

Boys.....588
Girls.....384

Total 972

	Boys		Girls		Total	
	No.	%	No.	%	No.	%
Blank	84	14.3	123	32.0	207	21.3
Dead	0	0	1	.3	1	.1
	84	14.3	124	32.3	208	21.4
Professional						
Minister	1	.2	0	0	1	.1
Trained nurse	0	0	4	1.0	4	.4
	1	.2	4	1.0	5	.5
Semi-professional						
Photographer	1	.2	0	0	1	.1
Federal or City Employee						
Ass't county official	1	.2	0	0	1	.1
R. F. D. carrier	4	.7	0	0	4	.4
Postmaster	1	.2	0	0	1	.1
	6	1.0	0	0	6	.6
Artisans						
Blacksmith	1	.2	0	0	1	.1
Bricklayer	1	.2	0	0	1	.1
Carpenter	4	.7	0	0	4	.4
Electrician	4	.7	0	0	4	.4
Mechanic	2	.3	0	0	2	.2
Painter	1	.2	0	0	1	.1
Plumber	1	.2	0	0	1	.1
	14	2.4	0	0	14	1.4
Transportation						
Chauffeur	4	.7	0	0	4	.4
Drayman	2	.3	0	0	2	.2
Expressman	5	.8	0	0	5	.5
Liveryman	5	.8	0	0	5	.5
Railroader	4	.7	0	0	4	.4
Telegrapher	3	.5	0	0	3	.3
Tel. employee	5	.8	3	.8	8	.8
	28	4.8	3	.8	31	3.1
Clerical Assistants						
Clerk	48	8.2	9	2.7	57	5.7
Bookkeeper	2	.3	1	.3	3	.3
Stenographer	1	.2	2	.5	3	.3
	51	8.7	12	3.5	63	6.3

*The data for this table were secured from the principals of these sixty first-class county high schools.

TABLE X (Continued)

	Boys		Girls		Total	
	No.	%	No.	%	No.	%
Personal Service						
Running skating rink	1	.2	0	0	1	.1
Middlemen (office workers)						
Insurance agent	2	.3	0	0	2	.2
Manufacture and Trade						
Banker	3	.5	0	0	3	.3
Grain business	1	.1	0	0	1	.1
Grocer	2	.3	0	0	2	.2
Livestock dealer	1	.2	0	0	1	.1
Lumberman	1	.2	0	0	1	.1
Merchant	2	.3	0	0	2	.2
Milliner	0	0	1	.3	1	.1
Oil	1	.2	0	0	1	.1
Salesman	11	1.9	1	.3	12	1.2
	22	4.1	2	.6	24	2.4
Teaching	8	1.4	23	6.0	31	3.1
Unclassified						
Ass't in laboratory	1	.2	0	0	1	.1
Fluctuating	2	.3	0	0	2	.2
Governess	0	0	1	.3	1	.1
Loafing	6	1.0	0	0	6	.6
Logging	1	.2	0	0	1	.1
Nothing	28	4.8	36	9.4	64	6.4
Printer	4	.7	0	0	4	.4
Reporter	1	.2	0	0	1	.1
Society	0	0	2	.5	2	.2
	43	7.3	39	10.2	82	8.2
In school						
A. and M. college	0	0	1	.3	1	.1
Business college	8	1.4	3	.8	11	1.1
College	3	.5	2	.5	5	.5
Military school	4	.7	0	0	4	.4
Private school	2	.3	10	2.6	12	1.2
"School"	27	4.6	24	6.2	51	5.1
School for nurses	0	0	2	.5	2	.2
State normal	2	.3	0	0	2	.2
School of music	0	0	4	1.0	4	.4
University	4	.7	1	.3	5	.5
	50	8.5	47	12.2	97	9.9
At home						
Keeping house	0	0	96	25.1	96	9.7
Married	0	0	27	6.2	27	2.7
Helping mother	0	0	1	.3	1	.1
Ill at home	2	.3	0	0	2	.2
	2	.3	124	3.6	126	12.9

TABLE X (Continued)

	Boys		Girls		Total	
	No.	%	No.	%	No.	%
Farmer						
Farmer	214	36.4	0	0	214	22.1
Dairy farmer	2	.3	0	0	2	.2
Stock farmer	1	.2	0	0	1	.1
	217	36.9	0	0	217	22.4
Day laborer						
Working in—						
Butcher shop	5	.8	0	0	5	.5
Factory	3	.5	1	.3	4	.4
Father's shop	1	.2	0	0	1	.1
Florist establishment	1	.2	0	0	1	.1
Flour mills	1	.2	0	0	1	.1
Home	4	.7	0	0	4	.4
Hosiery mills	0	0	3	.8	3	.3
Hotel	1	.2	0	0	1	.1
Iron works	2	.3	0	0	2	.2
Laundry	4	.7	0	0	4	.4
Mills	4	.7	2	.5	6	.6
Mines	3	.5	0	0	3	.3
Picture show	4	.7	0	0	4	.4
Restaurant	1	.2	0	0	1	.1
Sawmill	1	.2	0	0	1	.1
Soda fountain	2	.3	0	0	2	.2
Transfer business	2	.3	0	0	2	.2
Working	19	3.2	0	0	19	2.0
	58	9.9	6	1.8	64	6.5

TABLE XI

OCCUPATIONS OF THE FATHERS OF SENIORS, GRADUATES AND QUITTERS.*

	Seniors' Fathers' Occupat'ns (815)		Graduates' Fathers' Occupat'ns (388)		Quitters' Fathers' Occupat'ns (440)		Total Fathers' Occupat'ns (1643)	
	No.	%	No.	%	No.	%	No.	%
Blank	24	2.9	10	2.1	43	9.9	77	4.6
Cripple	0	0	0	0	1	.2	1	.06
Dead	57	6.7	32	8.8	56	12.9	145	8.8
Gone for six years	0	0	0	0	1	.2	1	.06
Invalid	0	0	1	.3	0	0	1	.06
Nothing	0	0	0	0	1	.2	1	.06
Retired	0	0	0	0	1	.2	1	.06
Too feeble to work	0	0	0	0	1	.2	1	.06
	81	9.7	43	11.2	104	23.8	228	13.96
Professional								
Architect	2	.2	0	0	0	0	2	.1
Dentist	4	.5	1	.3	1	.2	6	.3
Doctor	21	2.5	10	2.6	5	1.2	36	2.2
Engineer, civil	2	.2	1	.3	0	0	3	.2
Engineer, electrical	0	0	1	.3	0	0	1	.06
Engineer, mechani'l	0	0	2	.6	0	0	2	.1
Lawyer	12	1.4	6	1.5	3	.7	21	1.2
Minister	16	1.9	9	2.3	12	2.8	37	2.3
	57	6.8	30	7.9	21	4.9	108	6.6
Semi-professional								
Abstractor	1	.1	0	0	0	0	1	.06
Druggist	4	.5	2	.5	1	.2	7	.4
Journalist	1	.1	1	.3	0	0	2	.1
Photographer	1	.1	2	.5	0	0	3	.2
Vocalist	0	0	1	.3	0	0	1	.06
	7	.8	6	1.6	1	.2	14	.8
Federal or City Employee								
City official	7	.8	3	.8	1	.2	11	.7
Civil service	1	.1	0	0	0	0	1	.06
County official	11	1.3	2	.5	5	1.1	18	1.1
Officer	0	0	0	0	1	.2	1	.06
Postmaster	17	2.0	1	.3	0	0	18	1.1
Public works	0	0	0	0	1	.2	0	.06
R. F. D. carrier	0	0	0	0	4	.9	4	.3
Road overseer	0	0	0	0	1	.2	1	.06
State official	2	.2	1	.3	0	0	3	.2
State senator	1	.1	0	0	0	0	1	.06
Supt. of courthouse	0	0	0	0	1	.2	1	.06
	39	4.7	7	1.9	14	3.2	60	3.6

*The data for this table were secured from the seniors, graduates and quitters.

TABLE XI (Continued)

	Seniors' Fathers' Occupat'ns (815)		Graduates' Fathers' Occupat'ns (388)		Quitters' Fathers' Occupat'ns (440)		Total Fathers' Occupat'ns (1643)	
	No.	%	No.	%	No.	%	No.	%
Artisans								
Blacksmith	6	.7	1	.3	1	.2	8	.5
Bricklayer	0	0	1	.3	1	.2	2	.1
Carpenter	11	1.3	4	1.0	4	.9	19	1.2
Carriage trimmer	0	0	0	0	1	.2	1	.06
Decorator	1	.1	0	0	1	.2	2	.1
Gunsmith	0	0	0	0	1	.2	1	.06
Harnessmaker	0	0	2	.5	0	0	2	.1
Mechanic	0	0	4	1.0	0	0	4	.2
Moulder	0	0	1	.3	0	0	1	.06
Painter	1	.1	1	.3	1	.2	3	.2
Patternmaker	0	0	0	0	2	.4	2	.1
Plumber	1	.1	1	.3	0	0	2	.1
Shoemaker	3	.3	0	0	2	.5	5	.3
Stonemason	5	.6	1	.3	0	0	6	.4
Tinner	2	.2	0	0	0	0	2	.1
Tanner	1	.1	0	0	0	0	1	.06
Well digger	0	0	1	.3	0	0	1	.06
	31	3.7	17	4.6	14	3.2	62	3.8
Transportation								
Expressman	2	.2	4	1.1	0	0	6	.4
Railroader	20	2.4	13	3.4	4	.9	37	2.3
Telegrapher	0	0	1	.3	1	.2	2	.1
Telephone employee	3	.3	0	0	1	.2	4	.2
Transfer business	1	.1	0	0	0	0	1	.06
	26	3.1	18	4.8	6	1.3	50	3.0
Clerical Ass'ts								
Bartender	1	.1	0	0	0	0	1	.06
Bookkeeper	8	.9	3	.8	0	0	11	.06
Clerk	21	2.5	2	.5	9	2.1	32	2.0
Collector	0	0	0	0	1	.2	1	.06
Mail-order man	0	0	0	0	1	.2	1	.06
	30	3.6	5	1.3	11	2.5	46	2.8
Personal Service								
Barber	2	.2	0	0	0	0	2	.1
Hotel proprietor	2	.2	0	0	4	.9	6	.4
	4	.5	0	0	4	.9	8	.5
Middlemen (office workers)								
Insurance agent	5	.6	10	2.6	0	0	15	.9
Land agent	0	0	0	0	1	.2	1	.06
Real estate	8	.9	2	.5	1	.2	11	.7
	13	1.6	12	3.1	2	.4	27	1.6

TABLE XI (Continued)

	Seniors' Fathers' Occupat'ns (815)		Graduates' Fathers' Occupat'ns (388)		Quitters' Fathers' Occupat'ns (440)		Total Fathers' Occupat'ns (1643)	
	No.	%	No.	%	No.	%	No.	%
Manufacture & Trade								
Banker	5	.6	4	1.0	1	.2	10	.6
Brick	1	.1	0	0	0	0	1	.06
Business	1	.1	0	0	1	.2	2	.1
Butcher	2	.2	1	.3	4	.9	7	.4
Cement	0	0	1	.3	0	0	1	.06
Coal	1	.2	0	0	1	.2	2	.1
Contractor	14	1.6	5	1.3	3	.7	22	1.3
Cotton	1	.2	0	0	0	0	1	.06
Engineer (unclassified)	1	.1	0	0	0	0	1	.06
Florist	4	.5	0	0	0	0	4	.2
Foreman	9	1.0	1	.3	3	.7	13	.8
Foundryman	1	.1	0	0	0	0	1	.06
Grocer	10	1.2	2	.5	4	.9	16	1.0
Ice	0	0	0	0	1	.2	1	.06
Jeweler	0	0	0	0	3	.7	3	.2
Lumberman	16	1.9	6	1.5	0	0	22	1.3
Machinist	0	0	0	0	5	1.0	5	.3
Manufacturer	3	.3	7	1.8	1	.2	11	.7
Mechanic	15	1.8	0	0	0	0	15	.9
Merchant	80	9.6	32	8.0	17	3.9	129	7.9
Miller	6	.7	3	.8	2	.4	11	.7
Miner	11	1.3	1	.3	0	0	12	.7
Oil	1	.1	0	0	0	0	1	.06
Produce	0	0	2	.5	0	0	2	.1
Salesman	8	.9	0	0	0	0	8	.5
Shipping clerk	0	0	1	.3	0	0	1	.06
Supt. Mfg. Co.	0	0	0	0	2	.4	2	.1
Supt. mills	0	0	1	.3	0	0	1	.06
Supt. mines	0	0	1	.3	0	0	1	.06
Tie Inspector	1	.1	0	0	0	0	1	.06
Timber inspector	0	0	0	0	4	.9	4	.2
Tobacconist	6	.7	3	.8	2	.4	11	.7
Trader	2	.2	0	0	1	.2	3	.2
	201	24.5	71	18.3	58	13.2	330	20.1
Teaching	17	2.0	6	1.6	2	.4	25	1.5
Unclassified								
Floor walker	1	.1	0	0	0	0	1	.06
Laborer	1	.1	0	0	1	.2	2	.1
Laundryman	0	0	0	0	1	.2	1	.06
Miner	0	0	0	0	3	.7	3	.2
Pool room employee	0	0	1	.3	0	0	1	.06
Printer	3	.4	0	0	2	.4	5	.3
Undertaker	2	.2	1	.3	1	.2	4	.2
	7	.8	2	.6	8	1.7	17	1.0

TABLE XI (Continued)

	Seniors' Fathers' Occupat'ns (815)		Graduates' Fathers' Occupat'ns (388)		Quitters' Fathers' Occupat'ns (440)		Total Fathers' Occupat'ns (1643)	
	No.	%	No.	%	No.	%	No.	%
Farmer "Farmer"	295	35.4	160	42.0	180	41.4	635	38.7
Dairy farmer.....	1	.1	2	.6	0	0	3	.2
Fruit farmer.....	0	0	0	0	2	.4	2	.1
Poultry farmer....	0	0	0	0	1	.2	1	.06
Stock farmer.....	4	.4	7	1.8	12	2.7	23	1.4
Truck farmer.....	2	.2	1	.3	0	0	3	.2
Agricul'al field Agt.	0	0	1	.3	0	0	1	.06
	302	36.8	171	45.0	195	44.3	668	40.8

TALE XII

PRESENT OCCUPATIONS OF THREE GROUPS OF FORMER HIGH SCHOOL PUPILS TOGETHER WITH THOSE OF THEIR FATHERS.*

	Present occupation of Graduates (575)		Present occupation of older brothers and sisters (903)		Present occupation of Quitters (972)		Present occupations of Seniors' Graduates' Quitters' fathers (1643)		Total of all occupations (4093)	
	No.	%	No.	%	No.	%	No.	%	No.	%
Blank	60	10.2	103	11.4	207	21.3	228	13.9	598	14.3
Dead	1	.2	1	.1	1	.1	0	0	3	.07
	61	10.4	104	11.5	208	21.4	228	13.9	601	14.3
Professional	0	0	28	3.1	5	.5	108	6.6	141	3.4
Semi-professional	0	0	10	1.1	1	.1	14	.8	25	.6
Federal or City Employee	3	.5	29	3.2	6	.6	60	3.6	98	2.4
Artisans	3	.5	18	2.0	14	1.4	62	3.8	97	2.4
Transportation	2	.3	39	4.3	31	3.1	50	3.0	122	3.0
Clerical assistants	34	5.8	124	13.6	63	6.3	46	2.8	267	6.5
Personal Service	0	0	3	.3	1	.1	8	.5	12	.3
Middlemen (office workers)	0	0	8	.9	2	.2	27	1.6	37	.9
Manufacture and Trade	6	1.1	69	7.6	24	2.4	330	20.1	429	10.5
Teaching	124	21.6	131	14.4	31	3.1	25	1.5	311	7.6
In school	217	38.8	77	8.4	97	9.9	0	0	391	9.6
At home	59	10.3	130	14.3	126	12.9	0	0	315	7.7
Farmer	47	6.6	108	11.8	217	22.4	668	40.8	1040	25.4
Day laborer	15	2.7	18	2.0	64	6.5	0	0	97	2.3
Unclassified	4	.7	7	.8	82	8.2	17	1.0	110	3.1

*This table was derived from a combination of tables VIII to XII.

It will be seen at a glance that the constituency of the first-class county high schools of Tennessee are of a cosmopolitan nature. The occupations of former pupils and of parents cover a field ranging from 24 occupations (omitting the group enrolled in school) engaged in by the graduates, 66 by the quitters, 78 by the older brothers and sisters, to 105 by the fathers.

A condition such as this is far from being simple, and it would seem at first thought that the adapting of a suitable high school course of study would be almost impossible. A closer study of the tables, however, will reveal the fact that some two or three of these groups of occupations stand out above all the rest. Especially is this true if we consider the occupations of the fathers alone. We find here that 40.8 per cent are farmers, and 20.1 per cent are engaged in manufacture and trade. These occupations together with professional (6.6 per cent), artisans (3.8 per cent), federal or city employees (3.6 per cent), transportation (3 per cent), and clerical assistants (2.8 per cent) embrace 80.7 per cent of the occupations of all the fathers. The same seven groups of occupations, with that of teaching added, are likewise the leading ones engaged in by all the various groups of students who have formerly attended high school and are now at work. These outstanding facts concerning the occupations of the fathers and the pupils now at work are of vital importance to assist in forecasting the probable vocations of the students who finish high school. They become the determining factor in the discussion of our next chapter.

Since Tennessee is an inland state, bordering on no large body of water and lying upon none of the special highways of commerce, her people are primarily a rural folk with agriculture as their basal occupation, and the above mentioned leading occupations are practically those necessary to the life of such a people. Even if the people of Tennessee are predominantly an agricultural folk, yet the wide range of occupations engaged in by them argues against the establishment of strictly technical agricultural high schools. The general high school is the solution of the problem. A detailed discussion of that topic is reserved for the chapter on the program of studies. With these facts in mind, we are ready to forecast the probable vocations of the pupils who attend these first-class county high schools.

CHAPTER VI

PROBABLE VOCATIONS OF PUPILS ENROLLED IN TENNESSEE COUNTY HIGH SCHOOLS.

The previous chapter has shown rather conclusively what are the chief vocational opportunities of the pupils of the first-class county high schools of Tennessee. The problem set for this chapter is to ascertain what vocations the pupils of the first-class county high schools are likely to enter.

There are, at least, four ways of forecasting the probable vocations of the pupils of these high schools:

(1) By ascertaining the present occupations of the fathers of seniors, of graduates, and of quitters;

(2) A. By ascertaining the choice of occupations expressed by seniors, and by graduates of the previous year;

B. By ascertaining the present occupation of graduates of the previous year, who are at work, and the present occupations of older brothers and sisters who are graduated and who are at work;

C. By a comparison of the present and anticipated occupations of seniors and graduates;

(3) By ascertaining the present occupations of older brothers and sisters who did not graduate, and the present occupations of quitters;

(4) By ascertaining the chief vocations engaged in by the people of the State of Tennessee.

With this purpose in mind we shall discuss each of these divisions in the order named.

It is an evident fact that the occupations of the fathers, in a large measure, will be engaged in sooner or later by the children. Especially does this appear to be true in a rural agricultural region like Tennessee. It is also true that out of every community a very few leave the community to go into other occupations, but these are the exceptions to the rule. Consequently, the presentation of table XIII will reveal the probable vocations of the pupils of the first-class county high schools of Tennessee. Table XIII which follows was derived from table XI and is reproduced here to present in a concise form the facts of that extended table.

TABLE XIII

COMBINATION TABLE SHOWING OCCUPATIONS OF FATHERS OF SENIORS, GRADUATES AND QUITTERS.*

	Seniors' Fathers (815)		Graduates' Fathers (388)		Quitters' Fathers (440)		Total Fathers (1643)	
	No.	%	No.	%	No.	%	No.	%
Blank	81	9.7	43	11.2	104	23.8	228	13.9
Professional	57	6.8	30	7.9	21	4.9	108	6.6
Semi-professional	7	.8	6	1.6	1	.2	14	.8
Federal or City Emp.	39	4.7	7	1.9	14	3.2	60	3.6
Artisans	31	3.7	17	4.6	14	3.2	62	3.8
Transportation	26	3.1	18	4.8	6	1.3	50	3.0
Clerical Ass't.	30	3.6	5	1.3	11	2.5	46	2.8
Personal Service	4	.5	0	0	4	.9	8	.5
Middlemen	13	1.6	12	3.1	2	.4	27	1.6
Mfg. and Trade	201	24.5	71	18.3	58	13.2	330	20.1
Teaching	17	2.0	6	1.6	2	.4	25	1.5
Unclassified	7	.8	2	.6	8	1.7	17	1.0
Farmer	302	36.8	171	45.0	195	44.3	668	40.8

*This table was derived from table XI.

This table shows that the two vocations of farming and manufacture and trade claim nearly two-thirds (60.9 per cent) of the fathers of all the groups. These two large groups are followed, as would be expected, by smaller groups of professional men (6.6 per cent), artisans (3.8 per cent), city employees (3.6 per cent), men engaged in transportation (3 per cent), and clerks (2.8 per cent). This condition bears out the statement made previously in this study that the State of Tennessee is fundamentally an agricultural state. If the occupations of the fathers determine largely the occupations of the children, our conclusion is evident. These facts will be of help to us later in discussing the probable vocations of the high school students.

A second way of forecasting the probable occupations of pupils of the first-class county high schools of Tennessee, as has been stated, is to ascertain the choice of occupations expressed by seniors in these high schools and by graduates of the previous year. Also to ascertain the present occupations of graduates of the previous year who are at work, and of older brothers and sisters who graduated and are at work. Let us now turn to a discussion of these groups. The following tables reveal the facts in the case.

TABLE XIV

CHOSEN OCCUPATIONS OF SENIORS.*

Boys.....344
Girls.....471

Total.....815

	Boys		Girls		Total	
	No.	%	No.	%	No.	%
Blank	34	9.6	52	10.8	86	10.2
Professional						
Architect	1	.3	0	0	1	.1
Dentist	6	1.8	0	0	6	.7
Doctor	25	7.3	0	0	25	3.0
Engineer, civil	11	3.2	0	0	11	1.3
Engineer, electrical	19	5.5	0	0	19	2.2
Engineer, mechanical	6	1.8	0	0	6	.7
Engineer, mining	1	.3	0	0	1	.1
Lawyer	36	10.4	0	0	36	4.3
Minister	7	2.0	0	0	7	.8
Trained nurse	0	0	10	2.1	10	1.2
	112	32.7	10	2.1	122	14.5
Semi-professional						
Artist	1	.3	0	0	1	.1
Cartoonist	1	.3	0	0	1	.1
Chemist	4	1.2	0	0	4	.5
Draftsman	1	.3	0	0	1	.1
Druggist	5	1.5	0	0	5	.6
Journalist	3	.9	0	0	3	.4
Lecturer	2	.6	0	0	2	.2
Missionary	0	0	1	.2	1	.1
Musical artist	1	.3	1	.2	2	.2
Sculptor	1	.3	0	0	1	.1
	19	5.7	2	.4	21	2.4
Federal or City Employee						
Civil service	2	.6	0	0	2	.2
Mail clerk	2	.6	0	0	2	.2
U. S. Army (West Point)	2	.6	0	0	2	.2
U. S. Navy (Annapolis)	3	.9	0	0	3	.3
	9	2.7	0	0	9	.9
Transportation						
Expressman	0	0	1	.2	1	.2
Telegrapher	0	0	2	.4	2	.2
	0	0	3	.6	3	.3
Clerical Assistants						
Bookkeeper	7	2.0	4	.8	11	1.3
Office work	3	.9	0	0	3	.4
Stenographer	7	2.0	21	4.4	28	3.4
	17	4.9	25	5.2	42	5.1

*Data for this table were secured from the questionnaires filled by the seniors.

TABLE XIV (Continued))

	Boys		Girls		Total	
	No.	%	No.	%	No.	%
At Home						
Housekeeper	0	0	5	2.0	5	.5
Manufacture and Trade						
Banker	2	.6	0	0	2	.2
Contractor and builder	1	.3	0	0	1	.1
Business	19	5.5	1	.2	20	2.4
Engineer (unclassified)	9	2.6	0	0	9	1.0
Florist	1	.3	0	0	1	.1
Lumberman	1	.3	0	0	1	.1
Machinist	6	1.7	0	0	6	.7
Merchant	9	2.6	0	0	9	1.0
Milliner	0	0	2	.4	2	.2
Tobacconist	1	.3	0	0	1	.2
Salesman	2	.6	0	0	2	.2
	51	14.8	3	.6	54	6.2
Teaching						
"Teach"	31	9.0	228	47.9	259	31.1
Agriculture	4	1.2	1	.2	5	.6
Art	0	0	1	.2	1	.1
College	1	.3	1	.2	2	.2
Commercial	0	0	1	.2	1	.1
Domestic science	0	0	46	9.7	46	5.5
English	0	0	10	2.1	10	1.2
Expression	0	0	7	1.5	7	.8
French	0	0	1	.2	1	.1
In high school	0	0	2	.4	2	.2
History	1	.3	4	.8	5	.6
Kindergarten	0	0	2	.4	2	.2
Languages	2	.6	2	.4	4	.5
Latin	0	0	1	.2	1	.1
Mathematics	0	0	1	.2	1	.1
Music	0	0	37	11.5	37	4.4
Physical education	0	0	1	.2	1	.1
Primary	0	0	12	2.5	12	1.4
Psychology	1	.3	0	0	1	.1
	40	11.7	358	75.8	398	46.4
Unclassified						
Poultryman	1	.3	0	0	1	.1
Printer	1	.3	0	0	1	.1
Undertaker	1	.3	0	0	1	.1
Get good position	1	.3	0	0	1	.1
Study music	0	0	3	.6	3	.3
Don't expect to make my own living	0	0	5	2.0	5	.5
	4	1.2	8	2.6	12	1.2
Farmer	58	16.8	0	0	58	7.0

In the beginning we must remember that the seniors are a select group, the few out of the large number of freshmen who entered, who have survived the process of training, and who are imbued with the spirit which dominates the high schools of the state. They have entered the high school with the idea of preparing for college. Table XXVII shows that 62.4 per cent of the boys and 13.6 per cent of the girls plan to go to the university; that 4.1 per cent of the boys and 23.8 per cent of the girls plan to go to college; and that 10.8 per cent of the boys and 42.1 per cent of the girls plan to go to the normal school. In other words, 77.3 per cent of the boys and 79.5 per cent of the girls plan to enter either the university, the college, or the normal school. This evidences the fact that the greater part of the seniors plan to enter careers which begin after finishing college, and explains why such a big percentage of the boys (32.7 per cent) plan professional careers and why 75.8 per cent of the girls plan to teach.

Notwithstanding the fact that a large part of the seniors plan to go on to college, university, or normal school, there still remains a considerable number who, in all probability, will go directly into their life-work immediately upon leaving high school. Table XIV shows that 14.8 per cent of these plan to enter some phase of manufacture and trade and that 16.8 per cent of them expect to be farmers. Past conditions show the improbability of these boys ever going to college. We will agree that the high school has perhaps done its part for those who go on to college, but we wish, in this connection, to raise the question as to what it has done toward helping the other group. The chapter on the program of studies will probably throw some light on the question.

We seem safe in saying that from among the seniors will come the majority of the men who will leave the community to enter professional life. As to whether all of those who plan to enter professional life will do so, we shall discover a little later in this study. However, we must not forget that there is quite a large group who do not contemplate a professional career at all, and that the high school owes as much to them as to the ones who plan to enter professions.

Let us now turn to the table giving the chosen occupations of graduates of the previous year, and see what light it throws on the problem.

TABLE XV

PRESENT OCCUPATIONS OF GRADUATES*

Boys.....166
Girls.....222

Total.....388

	Boys		Girls		Total	
	No.	%	No.	%	No.	%
Blank	41	24.6	97	43.7	138	35.9
Professional						
Architect	1	.6	0	0	1	.3
Dentist	1	.6	0	0	1	.3
Doctor	9	5.4	0	0	9	2.3
Engineer, civil	4	2.4	0	0	4	1.0
Engineer, mining	1	.6	0	0	1	.3
Lawyer	11	6.6	0	0	11	2.9
Minister	5	3.0	0	0	5	1.3
	32	19.2	0	0	32	8.3
Semi-professional						
Agricultural agent	1	.6	0	0	1	.3
Authoress	0	0	3	1.3	3	.8
Chemist	2	1.2	0	0	2	.5
Illustrator	0	0	1	.5	1	.3
Journalist	3	1.8	1	.5	4	1.0
Orator	0	0	1	.5	1	.3
Vocalist	0	0	1	.5	1	.3
	6	3.6	7	3.3	13	3.4
Federal or City Employee						
Civil service	1	.6	0	0	1	.3
Federal court clerk	1	.6	0	0	1	.3
Mail clerk	1	.6	0	0	1	.3
U. S. Navy (Annapolis)	2	1.2	0	0	2	.6
	5	3.0	0	0	5	1.3
Artisans						
Electrician	9	5.4	0	0	9	2.3
Engineer (unclassified)	2	1.2	0	0	2	.5
Engineer, mill	1	.6	0	0	1	.3
Mechanic	5	3.0	0	0	5	1.3
	17	10.2	0	0	17	4.5
Transportation						
Expressman	1	.6	0	0	0	.3
	1	.6	0	0	1	.3

*Data for this table were secured from the questionnaires filled by the graduates.

TABLE XV (Continued)

	Boys		Girls		Total	
	No.	%	No.	%	No.	%
Clerical Assistants						
Accountant	1	.6	0	0	1	.3
Grain clerk	1	.6	0	0	1	.3
Purchasing clerk	0	0	1	.5	1	.3
Stenographer	5	3.0	5	2.3	10	2.6
	7	4.2	6	2.8	13	3.3
Middlemen (office workers)						
Real estate	1	.6	0	0	1	.3
Traveling salesman	1	.6	0	0	1	.3
	2	1.2	0	0	2	.5
Manufacture and Trade						
Auto business	1	.6	0	0	1	.3
Business	7	4.2	2	.9	9	2.3
Shipping clerk	1	.6	0	0	1	.3
Banker	5	3.0	0	0	5	1.3
	14	8.4	2	.9	16	4.2
Teaching						
"Teach"	17	10.2	71	32.0	88	22.9
Art and expression	0	0	1	.5	1	.3
Domestic science	0	0	12	5.4	12	3.1
Elementary school	0	0	1	.5	1	.3
English	0	0	1	.5	1	.3
German	0	0	1	.5	1	.3
History	1	.6	0	0	1	.3
Latin	0	0	1	.5	1	.3
Languages	0	0	1	.5	1	.3
Music	0	0	10	4.5	10	2.6
Mathematics	1	.6	1	.5	2	.5
Piano	0	0	1	.5	1	.3
Primary	0	0	1	.5	1	.3
Violin	0	0	1	.5	1	.3
	19	11.4	103	46.4	122	31.5
Unclassified						
Extension work	0	0	1	.5	1	.3
Go to college	4	2.4	1	.5	5	1.3
Librarian	0	0	2	.9	2	.5
Missionary	1	.6	0	0	1	.3
	5	3.0	4	1.8	9	2.4
Farmer	17	10.6	0	0	17	4.5
At home	0	0	3	1.4	3	.8

After a study of the previous table, we realize that practically the same thing may be said concerning graduates as was said of seniors; that is, that the majority of them plan to enter voca-

tions which begin after a college career. However, the group of senior boys planning a professional career, and the group of senior girls planning to teach are both very much larger in proportion than the corresponding groups of graduates. In fact, less than one graduate boy out of every five plans a professional career, and not quite one-half of the graduate girls plan to teach.

The same problem that arose in the case of the seniors arises here; namely, to what extent will the vocational plans of the graduates materialize. Although no definite answer can be had to this question, nevertheless two interesting side-lights are available which will help us to some extent; first, the present occupations engaged in by the graduates one year after finishing high school, and second, the occupations of older brothers and sisters who have graduated and are at work.

Let us turn to the tables showing the occupations of graduates who are at work, and of older brothers and sisters who have graduated and are at work.

TABLE XVI

PRESENT OCCUPATIONS OF GRADUATES*

Boys.....166
Girls.....222

Total 388

	Boys		Girls		Total	
	No.	%	No.	%	No.	%
Blank	1	.6	2	1.0	3	.8
Federal and City Employee						
Civil service	1	.6	0	0	1	.3
Ass't postmistress	0	0	1	.5	1	.3
	1	.6	1	.5	2	.6
Artisans						
Blacksmith	1	.6	0	0	1	.3
Bricklayer	1	.6	0	0	1	.3
Electrician	1	.6	0	0	1	.3
Machinist	2	1.2	0	0	2	.5
	5	3.0	0	0	5	1.3

*Data for this table were secured from the questionnaires filled by the graduates.

TABLE XVI (Continued)

	Boys		Girls		Total	
	No.	%	No.	%	No.	%
Transportation						
Expressman	1	.6	1	.5	2	.5
Motorman	1	.6	0	0	1	.3
Railroader	4	2.4	0	0	4	1.0
	6	3.6	1	.5	7	1.8
Clerical Assistants						
Bookkeeper	9	5.4	3	1.4	12	3.2
Clerk	14	8.4	5	2.3	19	4.9
Office work	2	1.2	0	0	2	.5
Drug clerk	2	1.2	0	0	2	.5
Stenographer	3	1.8	4	1.8	7	1.8
Timekeeper	1	.6	0	0	1	.3
	31	18.6	12	5.5	43	11.2
Manufacture and Trade						
Auto business	2	1.2	0	0	2	.5
Dressmaker	0	0	1	.5	1	.3
Ice	1	.6	0	0	1	.3
Amateur shopkeeper	1	.6	0	0	1	.5
Shipping clerk	2	1.2	0	0	2	.5
Foreman	2	1.2	0	0	2	.5
Mill hand	2	1.2	0	0	2	.5
	10	6.0	1	.5	11	2.9
Teaching						
"Teach"	13	7.8	54	24.4	67	17.5
Expression	0	0	1	.5	1	.3
Music	0	0	3	1.4	3	.8
	13	7.8	58	26.1	71	18.6
Unclassified						
Professional ball player	1	.6	0	0	1	.3
In School						
Business college	4	2.4	13	5.9	17	4.5
College	18	10.8	14	6.3	32	8.3
Conservatory	0	0	1	.5	1	.3
In high school	4	2.4	6	2.7	10	2.6
In school	4	2.4	11	4.5	15	3.6
Normal school (state)	3	1.8	20	9.0	23	6.0
Studying art	0	0	1	.5	1	.3
Studying domestic science	0	0	1	.5	1	.3
Studying music at home	0	0	11	5.0	11	2.9
Studying English at home	0	0	1	.5	1	.3
University	19	11.5	10	4.5	29	7.5
	52	31.3	89	39.9	141	36.7
At Home	0	0	58	26.1	58	15.1
Farmer	46	27.6	0	0	46	12.0

TABLE XVII

PRESENT OCCUPATIONS OF OLDER BROTHERS AND SISTERS WHO GRADUATED.*

Boys.....151
Girls.....195

Total 346

	Boys		Girls		Total	
	No.	%	No.	%	No.	%
Blank	10	6.7	25	12.7	35	10.7
Dead	0	0	1	.5	1	.3
	10	6.7	26	13.2	36	10.4
Professional						
Dentist	1	.7	0	0	1	.3
Doctor	7	4.6	0	0	7	2.0
Engineer, civil	2	1.4	0	0	2	.6
Lawyer	3	2.0	0	0	3	.9
	13	8.7	0	0	13	4.0
Semi-professional						
Chemist	1	.7	0	0	1	.3
Druggist	1	.7	0	0	1	.3
Journalist	1	.7	0	0	1	.3
	3	2.1	0	0	3	.9
Federal and City Employee						
Ass't postmaster	1	.7	0	0	1	.3
Civil service	1	.7	0	0	1	.3
County official	1	.7	0	0	1	.3
Mail service	1	.7	0	0	1	.3
U. S. Army	2	1.4	0	0	2	.6
	6	4.0	0	0	6	1.8
Artisans						
Plasterer	2	1.4	0	0	2	.6
Transportation						
Expressman	1	.7	2	1.0	3	.9
Clerical Assistants						
Bookkeeper	18	12.2	6	3.0	24	7.3
Clerk	8	5.3	1	.5	9	2.6
Stenographer	1	.7	5	2.6	6	1.8
Timekeeper	2	1.4	0	0	2	.6
	29	19.6	12	6.1	41	12.3
Middlemen (office work)						
Cotton broker	1	.7	0	0	1	.3
Insurance agent	3	2.1	0	0	3	.9
Real estate	1	.7	0	0	1	.3
	5	3.3	0	0	5	1.5

*Data for this table were secured from the questionnaires filled by the graduates, seniors and quitters.

TABLE XVII (Continued)

	Boys		Girls		Total	
	No.	%	No.	%	No.	%
Manufacture and Trade						
Contractor	2	1.3	0	0	2	.6
Foreman	1	.7	0	0	1	.3
Merchant	3	2.1	0	0	3	.9
	6	4.0	0	0	6	1.8
Teaching						
Teaching	6	4.0	66	33.6	72	20.9
Domestic science	0	0	2	1.0	2	.6
In high school	2	1.4	0	0	2	.6
Librarian	0	0	1	.5	1	.3
Music	0	0	1	.5	1	.3
Principal in H. S.	1	.7	1	.5	2	.6
	9	6.0	71	36.1	80	23.3
Unclassified						
County agent	1	.7	0	0	1	.3
In orphan's home	1	.7	0	0	1	.3
Reporter	1	.7	0	0	1	.3
	3	2.1	0	0	3	.9
In School						
Business college	0	0	2	1.0	2	.6
College	6	4.0	13	6.5	19	5.7
Medical school	2	1.3	0	0	2	.6
School	2	1.3	2	1.0	4	1.2
State normal	3	2.1	1	.5	4	1.2
Studying art	0	0	1	.5	1	.3
Studying music	0	0	1	.5	1	.3
Studying law	5	3.3	0	0	5	1.5
Studying in Italy	1	.7	0	0	1	.3
University	13	8.7	2	1.0	15	4.5
	32	21.1	22	11.2	54	16.2
At Home						
Housekeeper	0	0	32	16.3	32	9.3
Married	0	0	30	15.3	30	9.0
	0	0	62	31.6	62	18.3
Farmer	32	21.1	0	0	32	9.3

A study of the occupations of the graduates throws still further light upon the question of probable vocations, because in this instance a year has intervened since the boys and girls left high school. It is true of them, as it is true of the seniors, that they are a select group, and that they too are perhaps planning to take further training in some higher institution of learning.

Table XVI shows that 31.3 per cent of the boys and 39.9 per

cent of the girls are taking further training in some institution of learning at present. This, as in the case of the seniors, will explain the situation presented in table XV; namely, that 19.2 per cent of the boys plan a professional career and that 46.4 per cent of the girls select teaching as a vocation. They too, doubtless, look upon the high school as only a preparatory place for college.

Aside from the large number who are in school, there remains a group of students who have gone from their high school directly into vocations. Of the boys 18.6 per cent are clerical assistants, 27.6 per cent are farmers, and 6 per cent are in the manufacturing and trade group. Of the girls 26.1 per cent are at home, and 26.1 per cent are teaching. It is highly probable that these last named occupations in which the graduates are found one year after leaving high school, will remain their occupation for life (excepting, perhaps, the group of girls who are teaching).

The same question that was raised concerning the training of the seniors is pertinent here; namely, has the high school done its part as well by these as it has by those who have gone on to college? Has the boy who graduated from high school and gone directly into the industrial, commercial or agricultural phases of life any material advantages due to his training, over the boy who has never gone to high school? Surely the high school graduate possesses material advantages over the boy who has not finished the high school when it comes to entering college. Do these graduates who go out to take their places as farmers in the community carry with them more scientific methods of farming as a result of having gone through high school? Have these girls who are staying at home higher and more scientific ideals of home-making as a result of their high school education? These and numerous similar questions arise, but we reserve their discussion for the chapter on the program of studies.

Table XVII, showing the present occupation of older brothers and sisters who graduated, reveals practically the same condition as that we have just indicated for seniors and graduates, and hence requires no special comment.

After a study of the occupations of the graduates, we conclude that from the great per cent in college many of them will enter the professions; however, the number going directly

into their life-work is considerably larger in proportion than was found in the plans of the seniors. This but emphasizes the fact that the high school's sole duty is not preparing for college, but that its obligations to those who do not go on to college are equally as great.

A study of the graduates' plans for their life-work contrasted with what they are doing at present, will help us to see how far their hopes have materialized, and will also enable us to judge to some extent concerning the plans of the seniors. For this purpose tables XVIII and XIX have been prepared. For convenience in discussion, the boys and girls are grouped separately. The table showing the anticipatory occupations of girls as contrasted with their present occupations follows:

TABLE XVIII

COMBINATION TABLE SHOWING A COMPARISON OF THE PRESENT AND ANTICIPATED OCCUPATIONS OF THE SENIORS AND GRADUATES.*

Girls	Anticipatory		Present
	Chosen Occupations of Seniors (471)	Chosen Occupations of Graduates (222)	Present Occupations of Graduates (222)
	%	%	%
Blank	10.8	43.7	1.0
Professional	2.1	0	0
Semi-professional	.4	3.3	0
Federal or City Employee	0	0	.5
Transportation	.6	0	.5
Clerical Assistants	5.2	2.8	5.5
Manufacture and Trade	.6	.9	.5
Teaching	75.8	46.4	26.1
In School	0	0	39.9
At Home	2.0	1.4	26.1
Unclassified	2.6	1.8	0

*This table was derived from tables XIV-XVI.

The preceding table shows that over one-half of the graduates who planned to make teaching their occupation were actually engaged in it one year after leaving high school. The difference between the percentage of graduates anticipating teaching (46.4) and those already engaged in it (26.1) can be accounted

for by the fact that 39.9 per cent of them are taking further training.

The striking thing about this table is that only 2 per cent of the seniors and 1.4 per cent of the graduates planned to remain at home. Yet after the graduates had been out of high school nearly a year 26.1 per cent of them were actually in the home, and 31.6 per cent of the older sisters who have graduated are likewise in the home.

Judging from the above, in all probability we can safely say that at least one-third of the 75.8 per cent of the senior girls who plan to teach will go directly from the high school into the home. Here again we see emphasized the duty of the high school toward these students who do not go on to college, but become teachers and homemakers in rural communities.

Let us turn now to a similar table concerning the boys.

TABLE XIX

COMBINATION TABLE SHOWING A COMPARISON OF THE PRESENT AND ANTICIPATED OCCUPATIONS OF THE SENIORS AND GRADUATES.*

Boys	Anticipatory		Present
	Chosen Occupations of Seniors (344)	Chosen Occupations of Graduates (166)	Present Occupations of Graduates (166)
	%	%	%
Blank	9.6	24.6	.6
Professional	32.7	19.2	0
Semi-professional	5.7	3.6	0
Federal or City Employee	2.7	3.0	.6
Artisans	0	10.2	3.0
Transportation	0	.6	3.6
Clerical Assistants	4.9	4.2	18.6
Personal Service	0	1.2	0
Manufacture and Trade	14.8	8.4	6.0
Teaching	11.7	11.4	7.8
Unclassified	1.2	3.0	.6
In School	0	0	31.3
Farmer	16.8	10.6	27.6

*This table was derived from tables XIV-XVI.

Here we find, first, over four times as many graduates engaged in clerical positions as contemplated entering this vocation for life. Although this may be explained in part by the

fact that some of these are in this work temporarily, planning ultimately to enter other vocations, nevertheless the chances are that the majority of them because of lack of training will remain clerks. One year after graduation we find about as many graduates engaged in manufacturing and trade as planned to make it their life-work. This means that these boys will probably take no further training after their high school education.

Fewer boys than girls plan to teach. One year after graduation finds the majority of those who plan to do so already at work. But the occupation claiming the largest group of the graduate boys is that of farming. Here we find nearly three times as many boys already farming as planned to do so for life. We can not pass on without pausing to remark that the number of farmers constitutes about one-third of this graduate group.

Forecasting the future occupations of the senior boys on the basis of the present occupations of the graduates, we may safely assume that a greater percentage of them than here indicated will probably become clerks, farmers, or engage in transportation.

It will be of interest to note that nearly twice the percentage of seniors plan a professional career as the graduates who have been out of high school a year, while on the other hand 10.2 per cent of the graduates have felt it worth their while to plan to be artisans for life as contrasted with none of the seniors.

The occupations of the older brothers and sisters who did not graduate, and also the quitters will be considered next.

When we try to determine the probable vocations of the quitters we must remember that they constitute about 86 per cent of the entire high school population, and if considered from a democratic viewpoint, because of their numbers, constitute the most important part of the student body. The seriousness of elimination is evidenced by the fact that one of the main ideas permeating all the studies made in recent years concerning high school education is to try to determine some means by which this heavy elimination can be lessened. No doubt much has been accomplished. Notwithstanding all the changes that have come about in the course of study and in the organization of the high school, there yet remains for some reason or other, a large group who do not stay to graduate.

If we accept the interpretation that it is the duty of the *modern* high school to prepare this large group for the duties and responsibilities of life as well as to train the small group for college entrance, then the necessity for knowing the vocations which this larger group will enter is very apparent.

The preceding pages have shown us what vocations graduates and seniors plan to enter and what the obligations of the high school are to each group. We are now ready to see what vocations the large group which leaves without graduating will probably enter and what are the duties and responsibilities of the high school to them. With this in mind tables XX and XXI are presented.

TABLE XX

PRESENT OCCUPATIONS OF OLDER BROTHERS AND SISTERS WHO DID NOT GRADUATE.*

Boys.....357
Girls.....200

Total 557

	Boys		Girls		Total	
	No.	%	No.	%	No.	%
Blank	16	4.5	52	26.0	68	13.3
Professional						
Dentist	1	.3	0	0	1	.2
Doctor	2	.6	0	0	2	.4
Lawyer	5	1.4	0	0	5	.9
Minister	2	.6	0	0	2	.4
Trained nurse	0	0	5	2.5	5	.9
	10	2.8	5	2.5	15	2.8
Semi-professional						
Commercial artist	1	.3	0	0	1	.2
Draftsman	1	.3	0	0	1	.2
Druggist	2	.6	0	0	2	.4
Surveyor	1	.3	0	0	1	.2
Journalist	2	.6	0	0	2	.4
	7	2.0	0	0	7	1.2
Federal or City Employee						
Ass't postmaster	1	.3	0	0	1	.2
Civil service	8	2.2	0	0	8	1.4
County official	2	.6	0	0	2	.4
Mail official	4	1.1	0	0	4	.7
U. S. Army	3	.8	0	0	3	.5
U. S. Navy	5	1.4	0	0	5	.9
	23	6.4	0	0	23	4.1

*The data for this table were secured from the questionnaires filled by the seniors, graduates and quitters.

TABLE XX (Continued)

	Boys		Girls		Total	
	No.	%	No.	%	No.	%
Artisans						
Carpenter	4	1.1	0	0	4	.7
Plumber	2	.6	0	0	2	.4
Tinner	3	.8	0	0	3	.5
Decorator	3	.8	0	0	3	.5
Electrician	4	1.1	0	0	4	.7
	16	4.5	0	0	16	2.9
Transportation						
Chauffeur	1	.3	0	0	1	.2
Expressman	3	.8	0	0	3	.5
Garage owner	1	.3	0	0	1	.2
Railroader	20	5.6	1	.5	21	3.8
Street railway employee	5	1.4	0	0	5	.9
Telegrapher	4	1.1	1	.5	5	.9
	34	9.5	2	1.0	36	6.5
Clerical Assistants						
Bookkeeper	20	5.6	2	1.0	22	3.9
Clerk	41	11.5	4	2.0	45	8.1
Stenographer	6	1.7	9	4.5	15	2.7
Timekeeper	1	.3	0	0	1	.2
	68	19.0	15	7.5	83	14.9
Personal Service						
Barber	1	.3	0	0	1	.2
Hotel proprietor	1	.3	0	0	1	.2
Waiter	1	.3	0	0	1	.2
	3	.8	0	0	3	.5
Middlemen (office workers)						
Cotton broker	1	.3	0	0	1	.2
Real estate	2	.6	0	0	2	.4
	3	.8	0	0	3	.5
Manufacture and Trade						
Amateur vender	1	.3	0	0	1	.2
Business	2	.6	0	0	2	.4
Butcher	1	.2	0	0	1	.2
Contractor	2	.6	0	0	2	.4
Engineer (stationary)	3	.8	0	0	3	.5
Florist	1	.3	0	0	1	.2
Foreman	3	.8	0	0	3	.5
Lumberman	3	.8	0	0	3	.5
Merchant	17	4.8	0	0	17	3.1
Mgr. cement Co.	1	.3	0	0	1	.2
Marble works	1	.3	0	0	1	.2
Mechanic	11	3.1	0	0	11	2.0
Miller	1	.3	0	0	1	.2
Milliner	0	0	3	1.5	3	.5
Oil	1	.3	0	0	1	.2
Produce business	1	.3	0	0	1	.2
Seamstress	0	0	1	.5	1	.2
Shipping clerk	7	2.0	0	0	7	1.2
Tobacconist	2	.6	0	0	2	.4
With optical Co.	1	.3	0	0	1	.2
	59	16.5	4	2.0	63	11.3

TABLE XX (Continued)

	Boys		Girls		Total	
	No.	%	No.	%	No.	%
Teaching						
Teach	8	2.2	31	15.5	39	7.0
Athletic coach	1	.3	1	.5	2	.4
Domestic science	0	0	1	.5	1	.2
In high school	0	0	1	.5	1	.2
Music	0	0	5	2.5	5	.9
Principal high school	2	.6	1	.5	3	.5
	11	3.1	40	20.0	51	9.2
Unclassified						
Linotype	1	.3	0	0	1	.2
Reporter	1	.3	0	0	1	.2
Traveling	1	.3	0	0	1	.2
Undertaker	1	.3	0	0	1	.2
	4	1.1	0	0	4	.7
In School						
Business college	2	.6	1	.5	3	.5
College	0	0	5	2.0	5	.9
Medical school	1	.3	0	0	1	.2
Normal school	0	0	1	.5	1	.2
Private school	1	.3	0	0	1	.2
Studying expression	0	0	1	.5	1	.2
Studying law	1	.3	0	0	1	.2
In training for nursing	0	0	2	1.0	2	.4
University	6	1.7	1	.5	7	1.2
Veterinary college	1	.3	0	0	1	.2
	12	3.3	11	5.5	23	4.1
At Home						
Housekeeper	0	0	46	23.0	46	8.2
Married	0	0	21	10.5	21	3.8
Ill at home	1	.3	0	0	0	0
	1	.3	67	33.5	68	12.2
Farmer						
Farmer	74	20.7	0	0	74	13.3
Poultry farmer	2	.6	0	0	2	.4
	76	21.3	0	0	76	13.6
Day Laborer						
Day laborer	5	1.4	4	2.0	9	1.6
In laundry	1	.3	0	0	1	.2
In coal mines	4	1.2	0	0	4	.7
Printing office	3	.8	0	0	3	.5
On government dredge	1	.3	0	0	1	.2
	14	3.9	4	2.0	18	3.2

TABLE XXI

OCCUPATIONS OF QUITTERS*

Boys.....285
Girls.....155

Total.....440

	Boys		Girls		Total	
	No.	%	No.	%	No.	%
Blank	14	4.9	42	27.3	56	12.9
Nothing	2	.7	7	4.6	9	2.1
	16	5.6	49	31.9	65	15.0
Professional						
Trained nurse	0	0	1	.7	1	.2
Federal or City Employee						
Public works	1	.4	0	0	1	.2
R. F. D. carrier	1	.4	0	0	1	.2
U. S. Army	1	.4	0	0	1	.2
	3	1.0	0	0	3	.7
Artisans						
Blacksmith	1	.4	0	0	1	.2
Carpenter	1	.4	0	0	1	.2
Painter	1	.4	0	0	1	.2
Sewing machine repairer	1	.4	0	0	1	.2
Shoemaker	3	1.1	0	0	3	.7
Apprentice painter	2	.7	0	0	2	.5
Apprentice bricklayer	1	.4	0	0	1	.2
	10	3.5	0	0	10	2.3
Transportation						
Chauffeur	1	.4	0	0	1	.2
Expressman	1	.4	0	0	1	.2
Railroader	6	2.2	0	0	6	1.4
Telegrapher	3	1.1	0	0	3	.7
Telephone employee	2	.7	0	0	2	.5
Transfer business	1	.4	0	0	1	.2
	14	5.0	0	0	14	3.1
Clerical Assistants						
Bookkeeper	8	2.9	0	0	8	1.9
Clerk	13	4.6	0	0	13	3.0
Clerk in—						
Cafe	2	.7	0	0	2	.5
Butcher shop	1	.4	0	0	1	.2
Crescent News	1	.4	0	0	1	.2
Dry goods store	3	1.1	1	.7	4	.9
Drug store	2	.7	0	0	2	.5
Grocery store	2	.7	0	0	2	.5
Hardware store	4	1.4	0	0	4	1.0

*The data for this table were secured from the questionnaires filled by the quitters.

TABLE XXI (Continued)

	Boys		Girls		Total	
	No.	%	No.	%	No.	%
R. R. office	2	.7	0	0	2	.5
Shoe store	1	.4	0	0	1	.2
Soda fountain	2	.7	0	0	2	.5
Manager branch store	1	.4	0	0	1	.2
Office work	2	.7	0	0	2	.5
Salesman	4	1.4	0	0	4	1.0
Solicitor	1	.4	0	0	1	.2
Stenographer	3	1.1	3	1.9	6	1.4
	52	18.2	4	2.6	56	12.8
Manufacture and Trade						
Butcher	4	1.4	0	0	4	1.0
Engineer (stationary)	1	.4	0	0	1	.2
Foreman	1	.4	0	0	1	.2
Runs steam hammer	1	.4	0	0	1	.2
Samples phosphate	1	.4	0	0	1	.2
Shipping clerk	1	.4	0	0	1	.2
	9	3.1	0	0	9	2.1
Teaching	4	1.4	24	15.6	28	6.4
In School						
Business college	2	.8	0	0	2	.5
College	5	1.8	5	3.3	10	2.3
In school	3	1.1	3	1.9	6	1.4
In training for nursing	0	0	2	1.3	2	.5
Private school	3	1.1	0	0	3	.7
State normal	1	.4	1	.7	2	.5
Studying at home	0	0	1	.7	1	.2
	14	5.0	12	7.8	26	5.9
At Home						
Help parents at home	0	0	29	18.9	29	6.7
Housekeeper	0	0	24	15.6	24	5.6
Parents make my living	0	0	6	3.9	6	1.4
Raising chickens and doing house work	0	0	1	.7	1	.2
Sick	1	.4	0	0	1	.2
	1	.4	60	39.0	61	14.1
Farm	141	49.3	0	0	141	32.4

TABLE XXI (Continued)

	Boys		Girls		Total	
	No.	%	No.	%	No.	%
Unclassified						
Anything honorable	1	.4	0	0	1	.2
Day laborer	5	2.0	1	.7	6	1.2
Delivers groceries	1	.4	0	0	1	.2
Drive dairy wagon	1	.4	0	0	1	.2
Printer (helper)	1	.4	0	0	1	.2
Hire out	0	0	1	.7	1	.2
Motion picture operator	1	.4	0	0	1	.2
Road builder	1	.4	0	0	1	.2
Working in—						
Bottling plant	1	.4	1	.7	2	.4
Canal corps	1	.4	0	0	1	.2
Commissary trains	1	.4	0	0	1	.2
Father's shop	1	.4	0	0	1	.2
Factory	0	0	1	.7	1	.2
Garage	1	.4	0	0	1	.2
Hosiery mills	0	0	1	.7	1	.2
Father's mill	1	.4	0	0	1	.2
Saw mill	1	.4	0	0	1	.2
Coal mines	1	.4	0	0	1	.2
Timber	2	.7	0	0	2	.4
	21	7.4	5	3.3	26	5.9

Upon examination of the tables we note that the boys who quit high school are going to be artisans, clerical assistants, railroad men and employees in other vocations having to do with transportation and farming. The girls among the quitters report 31.9 per cent doing nothing, or blank, which means of course that they are staying at home. This, with the 39 per cent who report that they are at home, accounts for about three-fourths of the girls who answered. We should not pass over the fact that 7.8 per cent of these girls are in school. In almost every instance, the school mentioned is some special school whereby students may get immediate training for some particular work which they wish to enter. This same thing is true of the 5 per cent of the boys who report in school.

Again 15.6 per cent of these girls, so poorly prepared, are teaching in the rural schools of Tennessee. No doubt this condition over the South generally, accounts for much of the criticism of our country schools.

Practically one-half of the boys who quit high school before graduation are farming. This together with the fact that nearly

three-fourths of these girls are at home should be an "open door through which the high school should make itself felt in the lives of a large part of its constituency.

In concluding this chapter on the probable vocations, the writer has prepared three tables for the purpose of showing in a concise form the following things:

1. The range of occupations anticipated and engaged in by the boys and girls included in this study; and
2. A comparison between the nature and the range of occupations anticipated or engaged in by the boys with those of the girls.

TABLE XXII

COMPARISON OF THE PRESENT AND ANTICIPATED OCCUPATIONS EFFECTING TWO PER CENT OR MORE OF THE GIRLS.*

Girls	Anticipatory		Present Occupations			
	Chosen occupations of seniors (471)	Chosen occupations of graduates (222)	Present occupations of graduates (222)	Present occupations of older sisters who graduated (195)	Present occupations of older sisters who did not graduate (200)	Present occupations of the quitters (155)
	%	%	%	%	%	%
Blank	10.8	43.7	1.0	13.2	26.0	31.9
In school			39.9	11.2	5.5	7.8
Bookkeeper				3.0		
Clerk			2.3		2.0	
Stenographer	4.4	2.3		2.6	4.5	
Trained nurse	2.1				2.5	
Teaching	75.8	46.4	26.1	36.1	20.0	15.6
At home	2.0		26.1	31.6	33.5	39.0
Scattered (%)	5.0	7.6	4.6	2.3	6.0	5.7
No. scattered occupations	7	11	5	2	5	3
Total number of occupations chosen or engaged in by the different groups of girls	11	13	8	6	10	5

*This table was derived from tables XIV-XXI.

TABLE XXIII

COMPARISON OF THE PRESENT AND ANTICIPATED OCCUPATIONS EFFECTING TWO PER CENT OR MORE OF THE BOYS.*

Boys	Anticipatory		Present Occupations			
	Chosen occupations of seniors (344)	Chosen occupations of graduates (166)	Present occupations of graduates (166)	Present occupations of older brothers who graduated (151)	Present occupations of older bro's who did not graduate (357)	Present occupations of the quitters (285)
	%	%	%	%	%	%
Blank	9.6	24.6	.6	6.7	4.5	5.6
Doctor	7.3	5.4		4.6		
Engineer, civil	3.2	2.4				
Engineer, electrical	5.5					
Lawyer	10.4	6.6		2.0		
Minister	2.0	3.0				
Bookkeeper	2.0		5.4	12.2	5.6	2.9
Stenographer	2.0	3.0				
Business	5.5	4.2				
Engineer (unclassified)	2.6					
Insurance agent				2.1		
Merchant	2.6			2.1	4.8	
Teacher	11.7	11.4	7.8	6.0	3.1	
Farmer	16.8	10.6	27.6	21.1	21.3	49.3
Electrician		5.4				
Mechanic		3.0			3.1	
Banker		3.0				
Railroader			2.4		5.6	2.2
Clerk (unclassified)			8.4	5.3	11.5	4.6
Civil service					2.2	
Shipping clerk					2.0	
Day laborer						2.0
In school		2.4	31.3	21.1	3.3	5.0
Scattered (%)	18.8	15.0	16.8	17.0	33.0	28.4
No. scattered occupations	29	20	18	20	56	52
Total number of occupations chosen or engaged in by the different groups of boys	41	31	23	28	65	57

*This table was derived from table XIV-XXI.

TABLE XXIV

COMBINATION OF TABLES SHOWING PRESENT OR ANTICIPATED OCCUPATIONS OF ALL THE BOYS STUDIED.*

Boys	Anticipatory		Present Occupation			
	Chosen occupations of seniors (344)	Chosen occupations of graduates (166)	Present occupations of graduates (166)	Present occupations of older brothers who graduated (151)	Present occupations of older bro's who did not graduate (357)	Present occupations of the quitters (285)
	%	%	%	%	%	%
Blank	9.6	24.6	.6	6.7	4.5	5.6
Professional	32.7	19.2		8.7	2.8	
Semi-professional	5.7	3.6		2.1	2.0	
Federal or city employee	2.7	3.0	.6	4.0	6.4	1.0
Artisans		10.2	3.0	1.4	4.5	3.5
Transportation		.6	3.6	.7	9.5	5.0
Clerical assistants	4.9	4.2	18.6	19.6	19.0	18.2
Personal service					.8	
Middlemen		1.2		3.3	.8	
Manufacture and trade	14.8	8.4	6.0	4.0	16.5	3.1
Teaching	11.7	11.4	7.8	6.0	3.1	1.4
Unclassified	1.2	3.0	.6	2.1	1.1	
In school			31.3	21.1	3.3	5.0
At home					.3	.4
Farmer	16.8	10.6	27.6	21.1	21.3	49.3
Day laborer					3.9	7.4

*This table was derived from tables XIV-XXI.

The preceding discussion of the probable vocations of the students of the first-class county high schools of Tennessee has brought out the following facts:

1. The leading vocation engaged in by the boys of the groups studied, save those who are in school, is farming (graduates 27.6 per cent, older brothers who graduated 21.1 per cent, older brothers who did not graduate 21.3 per cent, quitters 49.3 per cent—16.8 per cent of the seniors plan farming as their life-work).
2. The occupation of farming is followed closely by manufacture and trade and clerical assistants. This verifies a statement made at the beginning of the chapter, that the occupations of the fathers determine largely the occupations of the children.
3. Practically two-thirds of the senior and four-fifths of the graduate boys plan careers others than professional.
4. The girls studied, aside from those who are in school, fall mostly into two groups, "teaching" and "at home," clerking, stenography, bookkeeping, and nursing being the only other occupations claiming as many as 2 per cent of them.

5. Over three-fourths of the senior and nearly one-half of the graduate girls plan to teach.
6. Practically three-fourths of the girls who left high school without graduating are at home, and one-half of this same group of boys is farming.
7. While practically none of the senior and graduate girls plan to be home-makers, nearly one-third of the graduate girls and older sisters who have graduated, are at home.
8. Tables XXII and XXIII show that the boys anticipate and are engaged in occupations covering a wide range, running from 23 occupations of the graduates to 57 by the quitters, as compared to the narrow range of the girls which runs from 5 occupations engaged in by the quitters to 13 anticipated by the graduates.

In the light of the above findings based on all the groups studied, we may safely conclude

1. That the majority of the girls who attend the first-class county high school in Tennessee will remain at home and that the great majority of those who do not will enter one of the three fields of teaching, commercial work, or nursing;
2. That about 5 per cent of all the boys who enter the first-class county high schools of Tennessee will eventually enter the professions;
3. That farming will be the chief occupation of the 95 per cent of the boys who enter non-professional careers;
4. That the occupations of next importance to farming will be manufacturing and trade, clerking, teaching, the work of the artisan, and the work having to do with transportation.
5. That notwithstanding the fact that the majority of the boys will enter, to a large extent, the occupations indicated above, nevertheless their range of occupations will cover a wide field.

CHAPTER VII

FURTHER TRAINING NEEDED BY PUPILS IN TENNESSEE COUNTY HIGH SCHOOLS.

The purpose in asking the graduates and seniors what further training they need for their life-work and where they plan to take it was to determine, if possible, to what extent the high school is functioning as a preparatory school for college,—a means to an end,—and to what extent it is an end in itself,—that is, a school consciously striving to prepare its pupils not solely for college entrance but for immediate participation in the leading activities of the community.

In the previous chapter we saw that two-thirds of the senior and four-fifths of the graduate boys plan careers other than professional. This being the case, it was thought wise to determine the training needed for those non-professional vocations and to see to what extent it would be possible for the students to receive the training needed for this work while still in high school.

TABLE XXV

FURTHER TRAINING NEEDED BY THE GRADUATES FOR THEIR LIFE-WORK.*

Boys.....166
Girls.....222

Total 388

	Boys		Girls		Total	
	No.	%	No.	%	No.	%
Blank	13	7.8	42	18.9	55	14.3
None	2	1.2	3	1.4	5	1.3
Undecided	2	1.2	1	.5	3	.8
	17	10.2	46	20.8	63	16.4
Academic Training In school—						
Annapolis	1	.6	0	0	1	.3
College	41	24.6	44	19.8	85	22.1
Post graduate in high school	12	7.2	31	14.5	43	11.3
Summer school	0	0	2	.9	2	.5
University	17	10.2	8	3.6	25	6.5

*The data for this table were secured from the questionnaires filled by the graduates.

TABLE XXV (Continued)

	Boys		Girls		Total	
	No.	%	No.	%	No.	%
In college subjects—						
Chemistry	1	.6	0	0	1	.3
English	6	3.6	2	1.0	8	2.1
German	0	0	1	.5	1	.3
History	0	0	1	.5	1	.3
Mathematics	3	1.8	0	0	3	.8
Natural sciences	1	.6	0	0	1	.3
	82	49.2	89	40.8	171	44.8
Professional Training						
Art	0	0	2	.9	2	.5
Expression	0	0	1	.5	1	.3
Law	12	7.2	0	0	12	3.2
Music	0	0	6	2.7	6	1.5
Normal school	4	2.4	37	16.7	41	10.7
Teacher training	1	.6	18	8.1	19	5.0
Voice	0	0	1	.5	1	.3
	17	10.2	65	29.4	82	21.5
Technical						
Agriculture	18	10.8	0	0	18	4.6
Architecture	1	.6	0	0	1	.3
Dentistry	1	.6	0	0	1	.3
Domestic science	0	0	8	3.6	8	2.1
Engineering courses	9	5.4	0	0	9	2.5
	29	17.4	8	3.6	37	9.8
Practical Business Training						
Accounting	1	.6	0	0	1	.3
Business course	10	6.0	9	4.0	19	5.0
Practical experience	9	5.4	5	2.3	14	3.7
Shop apprentice	1	.6	0	0	1	.3
	21	12.6	14	6.3	35	9.3

TABLE XXVI

WHERE GRADUATES PLAN TO TAKE THEIR FURTHER TRAINING FOR THEIR LIFE-WORK.*

Boys.....166
Girls.....222

Total 388

	Boys		Girls		Total	
	No.	%	No.	%	No.	%
Blank	22	13.2	37	16.6	59	15.3
Undecided	33	19.8	46	20.7	79	20.5
	55	33.0	83	37.3	138	35.8
Business college	5	3.0	7	3.1	12	3.1
College	8	4.8	36	16.2	14	11.4
Conservatory of music	0	0	4	1.8	4	1.0
High school	1	.6	0	0	1	.3
Library	0	0	1	.5	1	.3
Naval academy	1	.6	0	0	1	.3
Normal school	9	5.4	49	22.1	58	15.1
Polytechnic	4	2.4	2	.9	6	1.5
Practical life	7	4.2	7	3.2	14	3.6
Railroad shops	1	.6	0	0	1	.3
School of journalism	1	.6	0	0	1	.3
University	74	44.4	33	15.0	107	27.8

*The data for this table were secured from the questionnaires filled by the graduates.

TABLE XXVII

WHERE SENIORS PLAN TO TAKE THEIR TRAINING FOR THEIR LIFE-WORK.*

Boys.....344
Girls.....471

Total 815

	Boys		Girls		Total	
	No.	%	No.	%	No.	%
Blank	11	3.4	22	4.0	33	4.0
Indefinite	2	.6	2	.4	4	.5
None	1	.3	4	.8	5	.6
	14	4.3	28	5.2	42	5.1
Business college	33	9.6	25	5.2	58	7.0
College	14	4.1	113	23.8	127	15.3
Conservatory of music	1	.3	21	4.4	22	2.6
Correspondence school	7	2.0	1	.2	8	1.0
Experience	14	4.1	3	.6	17	2.0
Finishing school in languages	0	0	1	.2	1	.1
Home work	1	.3	1	.2	2	.2
Naval academy	3	.9	0	0	3	.4
Normal school	37	10.8	200	42.1	237	29.4
Polytechnic	1	.3	0	0	1	.1
Private instruction	2	.6	2	.4	4	.5
Reading current literature	1	.3	0	0	1	.1
School for nurses	0	0	10	2.2	10	1.2
University	215	62.4	65	13.6	280	33.6
West Point	1	.3	0	0	1	.1
Y. W. C. A. Training School	0	0	1	.2	1	.2

*The data for this table were secured from the questionnaires filled by the seniors.

Table XXV shows that practically 90 per cent of the graduate boys feel that they need further training for their life-work and that 59.4 per cent of these feel that they need more academic or professional training; that practically 80 per cent of the graduate girls feel that they need further training for their work and that 70.2 per cent of these feel the necessity of more academic or professional training. This condition viewed from one angle seems very desirable, since practically all the students who graduate from the high schools go out feeling the necessity of, and filled with the ambition for, higher training, but when considered in the light of actual conditions it appears very different. We have already seen in this study that only about one-third of all the graduates are really in higher institutions of

learning one year after graduation. This leaves the other two-thirds with no special preparation for any particular occupation, and consequently, they are forced to enter occupations other than those they desire. These same students, as table XXIV shows, are entering vocations for which the high school might well have prepared them. For example, 3 per cent are artisans, 3.6 per cent are engaged in transportation, 6 per cent are engaged in manufacturing and trade, 7.8 per cent are teaching, 18.6 per cent are clerking, and 27.6 per cent are farming. In other words, two-thirds of them are in occupations for which some specific training might have been included in their high school education. In that event, the high school would have been an end in itself, whereas it is a means to an end which the majority of them will never attain.

Judging from the graduates, we may safely assume that the above discussion will hold true for the seniors also.

In examining tables XXVI and XXVII we see that 3.1 per cent of the graduates and 7 per cent of the seniors plan to go to a business college for further training. There is no special reason why the high school could not include this phase of training in its course of study. We see also from table XXII that 75.8 per cent of the senior and 46.4 per cent of the graduate girls plan teaching as a career, and that 42.1 per cent (table XXVII) of the senior and 22.1 per cent (table XXVI) of the graduate girls plan to enter the normal school for further training. This implies that quite a large per cent of these girls go directly into teaching without any professional training. In fact table XXII shows that 26.1 per cent of the graduate girls, 36.1 per cent of the older sisters who graduated, 20 per cent of the older sisters who did not graduate, and 15.6 per cent of the quitter girls are already teaching. It seems that there could be no stronger argument for Teacher-Training* in these first-class county high schools than this statement.

The fact that the great majority of the seniors and graduates of the first-class county high schools of Tennessee are pointed

*After this study was begun the sentiment favoring Teacher-Training became so strong that it was enacted into law by the Tennessee Legislature.

toward the higher scholastic institutions is but proof of the fact that the high schools themselves are dominated by the academic spirit and have their attention directed mainly toward the few who go on to college and ultimately enter the professions, rather than the great number who go from the high school directly into the non-professional occupations. This idea is so prevalent that it has permeated practically every phase of the high school work. For example, in the fall of 1914, William R. Bourne, at that time State High School Inspector for Tennessee, sent out a questionnaire to his high school principals in which he asked them this question: "What is the best way of judging of the efficiency of your high school?" In practically every instance the answer was, "The way my graduates succeed in their freshman year at the university." We may be safe in assuming, however, that the old idea that the high school is to prepare the special few for college entrance is fast giving way to the modern and democratic idea that it is the "people's school," and the purpose of it is to prepare all the people for the duties and activities of modern life, including the preparation of those whose plan is to enter college. A system of high schools which does not live up to this ideal is out of harmony with the democratic principle of the "greatest good to the greatest number."

CHAPTER VIII

PROGRAM OF STUDIES OF TENNESSEE COUNTY HIGH SCHOOLS

The purpose of this study on the Function of Secondary Education all along has been to determine the extent that the high school is functioning in the lives of its pupils. Since the course of study is the heart and core of the high school, and the chief means through which the high school accomplishes its task, it was thought wise at this point to enter a rather detailed discussion of the course of study in these first-class county high schools of Tennessee.

This chapter falls readily into three divisions. The first section aims to set forth: first, certain facts which will justify statements already made several times concerning the classical and traditional nature of the high school course of study; and second, an historical sketch of the growth of the high schools of Tennessee, together with a parallel study of the development of the course of study.

The second section has to do with a detailed discussion of the functioning of the course of study from the pupil's point of view.

The third section is a summary of the facts ascertained and a discussion of the need of the reorganization of the course of study in the light of these facts, to meet the urgent needs of the constituency of these first-class county high schools.

A more detailed discussion of these divisions is necessary in order that their real significance may be understood. We will now pass to a discussion of the first section.

High school education in Tennessee really begins in 1909 when the legislature passed a law providing for the establishment of county high schools. Previous to this time there were high schools only in the larger centers of population, but they were few in number as the state is largely agricultural and as the population lives mostly in the rural communities. In addition to the few high schools which existed previous to 1909, there were also a good many private schools doing work of a second-

ary nature, many of which have since been converted into county high schools.

The growth of high schools in Tennessee since 1909 has been marvelous. The first year, as table XXVIII shows, 97 schools qualified as county high schools. Although the large majority of these schools were new in their organization, yet a goodly number of them were formed from private academies and schools already in existence.

The problem of evolving standards and working out a basis of classification required time and as a result it was not until the scholastic year of 1911-12 that the High School Inspector of Tennessee classified the high schools on a basis of the first, second, and third classes.

Although the schools after 1911 have State classification, the reports, showing attendance for the entire state by years, are not made out according to this classification of the schools. For that reason table XXIX, which shows the growth of high school attendance by years and classes since 1909, shows this for all the high schools of the state together instead of by classes of high schools, as we should like to have it.

While table XXVIII shows the growth of high schools from the standpoint of the number of high schools established, table XXIX shows the growth from the standpoint of the number of pupils enrolled in each grade from 1909 to 1916.

In contemplating this rapid development in high school education from the standpoint of the number of high schools established and the increased enrolment of pupils in the various grades of these high schools, we wonder just what the course of study of these high schools, was in the beginning (1909) and what changes, if any, have taken place during this period.

In order to answer these points, it will be necessary to determine several matters:

1. Whether or not the various subjects that were in the course of study in 1909 have kept pace with the growth of the high schools.
2. Along what lines the high school course of study has made the greatest development.

TABLE XXVIII

STATE CLASSIFICATION OF COUNTY HIGH SCHOOLS OF TENNESSEE FROM 1909 TO 1916.*

Year	First Class	Second Class	Third Class	Total
1909-1910	?	?	?	97
1910-1911	?	?	?	102
1911-1912	27	35	49	111
1912-1913	37	37	43	117
1913-1914	53	43	47	143
1914-1915	64	41	70	176
1915-1916	68	38	78	184

*The data for this table were derived from the Biennial Reports of the State Superintendent of Public Instruction of Tennessee.

TABLE XXIX

NUMBER OF PUPILS ENROLLED IN EACH GRADE OF COUNTY HIGH SCHOOLS OF TENNESSEE SHOWING ANNUAL INCREASE, FROM 1909 TO 1916.*

Year	Ninth Grade		Tenth Grade		Eleventh Grade		Twelfth Grade		Total	
	No.	%	No.	%	No.	%	No.	%	No.	%
1909-1910	2794		1412		651		281		5138	
1910-1911	3552	27.1	1674	18.6	960	47.5	448	59.4	6634	29.1
1911-1912	3800	36.0	1979	40.2	1138	74.8	629	124.2	7546	46.9
1912-1913	4330	55.0	2078	47.2	1187	82.3	715	154.4	8310	61.7
1913-1914	4659	66.7	2666	88.8	1678	157.7	930	230.9	9933	93.3
1914-1915	5449	95.0	3057	116.5	2070	217.9	1160	312.8	11736	128.4
1915-1916	5617	101.0	3366	138.4	2188	236.1	1430	408.9	12601	145.2

*The data for this table were derived from the biennial reports of the State Superintendent of Public Instruction of Tennessee.

3. What the general atmosphere of the high school was in 1909, and to what extent it has changed, if it be judged by the content of the course of study.
4. What the general tendencies of the course of study are at present.

Table XXX has been prepared with these points in mind. It shows the development of each subject or group of subjects in the course of study, and also gives a comparison between the increase in the enrolment each year of all the high schools and the percentage of growth each subject or group of subjects undergoes. In both instances, the scholastic year 1909-10 is taken as a basis on which the percentage of increase is figured. The figures giving the annual increase in the enrolment based on the scholastic year 1909-10 are taken from table XXIX. The

TABLE XXX

SHOWING A COMPARISON BETWEEN THE DEVELOPMENT OF EACH SUBJECT IN THE COURSE OF STUDY AND THE INCREASE IN THE ENROLMENT EACH YEAR OF THE HIGH SCHOOL FROM 1909 TO 1916.*

Subjects	Year 1909-10	Year 1910-11	%	Year 1911-12	%	Year 1912-13	%	Year 1913-14	%	Year 1914-15	%	Year 1915-16	%
Percentage of annual increase in enrolment			29.1		46.9		61.7		93.3		128.4		145.2
English	14692	21633	47.2	25560	73.9	26313	79.2	30522	107.8	36868	150.9	40252	173.9
Spelling	3222	4990	54.9	6464	100.6	6633	106.0	7534	133.8	9839	205.3	10381	222.2
Writing	2531	3754	48.3	4734	87.0	4231	67.2	5676	120.0	5869	131.9	5840	130.7
Grammar	2297	3309	44.1	3382	47.2	3684	60.4	4464	94.3	4988	117.1	5477	138.5
Composition	2716	3450	27.0	3989	46.8	4464	64.4	4756	75.1	6261	130.5	7852	189.1
Rhetoric	1300	2393	83.2	2542	94.6	3070	135.0	3471	165.8	4183	220.3	4526	246.5
Literature	2620	3737	42.6	4449	69.8	4231	61.5	4621	76.4	5728	118.6	6176	135.7
Ancient Languages	2674	4424	65.4	4427	65.4	4842	81.1	5158	92.9	5773	115.9	5813	117.4
Greek	42	40	-4.8	43	2.4	7	-83.3	29	-31.0	17	-59.5	23	-45.2
Latin	2632	4384	66.6	4384	66.6	4835	83.7	5129	94.8	5756	118.7	5790	120.0
Modern Languages	384	714	85.9	809	110.7	862	124.5	1000	160.4	1151	200.0	1328	245.8
French	89	220	147.2	228	156.2	177	100.0	226	153.9	223	100.5	251	182.2
German	162	358	120.9	451	178.4	610	276.5	703	334.0	833	414.2	838	417.3
Spanish	133	136	2.2	130	-2.2	75	-43.7	71	-46.6	95	-28.6	239	80.0
Mathematics	5268	7672	45.6	8672	64.6	9984	89.5	11229	113.2	13206	150.7	14493	175.1
Arithmetic	1757	2436	38.1	2679	52.4	3446	96.1	3249	84.9	3866	120.1	4032	129.5
Algebra	2466	3778	53.2	4369	77.1	4620	87.3	5503	123.2	6841	177.4	7317	196.7
Geometry	1045	1458	38.6	1624	55.4	1918	83.5	2477	137.0	2499	139.3	3144	200.9
Natural Sciences	3863	4754	23.1	6869	77.8	7300	88.9	9590	148.3	10281	166.1	10634	175.3
Agriculture	805	865	7.0	1465	82.0	1405	74.5	1826	126.8	1927	139.4	2371	194.5
Chemistry	117	170	45.3	253	116.2	377	222.2	516	341.0	497	325.0	616	426.5
Biology	347	1029	196.2	1189	245.5	1467	322.8	1819	424.2	2893	733.7	3272	842.9
Geology	188	173	-8.0	476	153.2	542	183.0	553	194.2	317	68.6	339	80.3
Physics	459	626	36.3	858	86.9	829	80.6	1123	144.7	1337	191.3	1364	197.2
Physiology	1306	1106	-15.3	1473	12.8	1403	7.4	2234	71.1	1727	32.2	1653	26.6
Physical Geography	641	785	22.5	1155	80.2	1277	99.2	1519	137.0	1583	147.0	1019	58.9
Social Sciences	4377	4867	11.2	5825	33.1	5543	26.6	7276	66.2	8797	100.9	9855	125.2
Civics	614	641	4.4	865	40.9	870	41.7	797	29.8	1081	76.1	1087	78.6
American History	1010	990	-2.0	1111	10.0	1176	16.4	1323	30.9	1224	21.1	1497	48.2
English History	1707	2098	22.9	2165	27.2	2441	43.0	2867	67.9	3203	87.7	2788	63.3
General History	1046	1138	8.8	1684	61.0	1056	.9						
Ancient History								1395		2055		2577	
Med. and Mod. History								894		1234		1896	
Commercial Work	780	1402	79.8	772	-.1	915	17.3	984	26.2	1418	81.8	1499	92.2
Bookkeeping	231	501	116.9	267	15.6	221	-4.3	240	4.0	465	101.3	441	90.9
Commercial Arith.	349	340	-2.6	196	-43.8	270	-22.6	319	-8.6	445	27.5	492	40.9
Commercial Law	48	75	56.3	48	0	67	40 0	62	29.2	87	81.3	67	40.0
Short hand	59	218	270.0	125	111.8	168	185.0	120	103.4	212	260.0	226	283.1
Typewriting	93	268	188.2	136	46.2	189	103.2	243	161.3	209	124.7	273	193.5
Practical Arts	589	597	1.0	706	20.0	1389	135.8	2342	297.6	3173	438.7	3358	470.1
Home Economics	438	445	1.6	582	32.9	1232	181.3	2017	360.5	2555	483.3	2750	527.9
Manual Training	151	152	.6	124	-17.9	157	4.0	325	115.2	618	309.3	608	302.6
Drawing	873	1652	89.2	1579	80.9	1190	36.3	1558	78.5	1691	93.7	1429	63.7
Vocal Music	1543	2509	69.1	3362	117.9	2646	71.5	3328	115.7	4449	187.0	4179	170.8

*This table was derived from data taken from the Biennial Reports of the State Superintendent of Public Instruction of

figures showing the annual increase or growth of each subject were obtained from the Biennial Report of the Superintendent of Public Instruction of Tennessee and represent the number of pupils enrolled in that subject each year from 1909 to 1916.

The English group, as would be expected, more than keeps pace with the increased enrolment from year to year. The two subjects of this group which show the greatest growth are rhetoric and spelling. Writing, grammar, and literature drop below the line, a fact which probably indicates that they are not stressed as much as rhetoric and spelling.

Ancient languages show a considerable decrease. The first three years they more than keep pace with the growth of enrolment in the high schools, the fourth year they about hold their own, and the fifth and sixth they fall far behind. What is said, however, of this group may be said of Latin alone, as Greek is almost a negligible quantity.

While ancient languages are on the wane, modern languages are coming more and more into prominence. There is quite a contrast between the status of German and of Spanish. Spanish lacks a great deal of keeping pace with the enrolment increase, but German* shows growth by leaps and bounds.

Mathematics shows about the same growth as English. It is interesting to note that arithmetic, which should be of great value to these boys and girls in the rural districts, is gradually being displaced by algebra and geometry, subjects which in all probability will be of little use to most of them.

The natural sciences, too, show about the same development as English and mathematics. Physics and agriculture more than hold their own; chemistry and biology make remarkable progress; while geology, physiology, and physical geography fall far short of holding their own.

The social sciences are not keeping pace with the increase in enrolment. It seems that American history and civics, the most vital phases of all history work, for American students, receive very little stress. This is true, perhaps, because of the fact that they are usually offered in the senior year of the high school.

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*It is useless to mention the effect the war has had on this subject in the high school.

Commercial work seems never to have got a very good hold on the high schools. This is about what one would expect, since these high schools are small, as a rule, and are situated in the smaller towns; consequently they have little means with which to carry on this kind of work.

No group of subjects shows such remarkable growth as the practical arts group. Home economics has the greatest growth of any subject in the course of study with the exception of biology. However, conditions are far from ideal when we realize that of the 12601 pupils in these high schools for the year 1915-16 over one-half of them are girls and that only 2750 are given an opportunity to take this kind of work.

In a general way, we can say that vocal music, English, mathematics, and the natural sciences have made about equal growth and have more than kept pace with the increase in enrolment of the high schools; that modern languages and the practical arts have made very remarkable improvement; and that the ancient languages, the social sciences, and the commercial branches have shown small growth and have not kept pace with the increase of the enrollment of the high schools. In other words, some of the traditional elements in the course of study (ancient languages and some forms of social sciences) are giving way to modern languages, the natural sciences, and practical arts work.

It does not take one with prophetic power to tell which way the wind is blowing in this situation. It is evident that forces are at work which are bringing a new order. However, we should not deceive ourselves by believing that this new order is upon us, for changes in the educational world come slowly, by evolution rather than by revolution, and as matters now stand the old order is still in control. To make this matter more evident to the reader tables XXXI and XXXII are presented. These tables show exactly the total number of units the seniors and graduates (included in this study) completed while in high school.

TABLE XXXI

TOTAL NUMBER OF HIGH SCHOOL UNITS COMPLETED BY THE SENIORS.*

Boys.....366
Girls.....533

Total 899

	Boys		Girls		Total	
	Total Number of Units	Average Units per Pupil	Total Number of Units	Average Units per Pupil	Total Number of Units	Average Units per Pupil
English						
Eng. Grammar.	352.0	.95	511.0	.97	863.0	.96
Rhetoric	360.5	.97	552.5	1.04	913.0	1.01
English Lit.....	430.5	1.2	552.5	1.04	903.0	1.00
American Lit...	303.0	.82	476.0	.89	779.0	.87
	1446.0	3.94	2092.0	3.94	3458.0	3.84
Mathematics						
Arithmetic	169.0	.46	313.5	.59	482.5	.54
Algebra	574.5	1.55	802.0	1.52	1376.5	1.53
Plane Geometry	344.5	.93	473.5	.9	818.0	.91
Solid Geometry	130.5	.35	152.0	.29	282.5	.31
Trigonometry .	39.0	.10	26.5	.05	65.5	.07
	1257.5	3.39	1767.5	3.35	3025.0	3.36
Natural Science						
Agriculture	235.5	.64	87.0	.17	322.5	.35
Biology	181.5	.49	249.5	.47	431.0	.47
Botany	46.0	.12	56.0	.11	102.0	.11
Chemistry	177.0	.48	220.0	.42	397.0	.44
Geology	25.0	.07	42.5	.08	67.5	.07
Physical Geog..	95.5	.26	110.0	.21	205.5	.23
Physics	261.0	.7	333.0	.63	594.0	.65
Physiology	132.5	.36	195.5	.37	328.0	.36
Zoology	31.5	.09	42.0	.08	73.5	.08
	1185.5	3.21	1335.5	2.54	2521.0	2.76
Foreign Languages						
Ancient						
Latin						
Grammar. ...	219.0	.60	370.5	.69	589.5	.65
Caesar... ...	179.5	.49	312.5	.59	492.0	.56
Cicero... ...	124.0	.34	223.5	.42	347.5	.39
Virgil.....	89.5	.24	185.0	.35	274.5	.30
Greek	10.0	.03	3.0	.006	13.0	.01
Modern						
German	131.5	.36	283.5	.54	415.0	.46
French	57.0	.16	103.5	.2	160.5	.18
Spanish	42.0	.11	52.0	.1	94.0	.10
Total Languages.	852.5	2.33	1533.5	2.89	2386.0	2.65

*The data for this table were secured from the requisitions made by the principals for diplomas. These data at the time were in the hands of the State High School Inspector, Wm. R. Bourne.

TABLE XXXI (Continued)

	Boys		Girls		Total	
	Total Number of Units	Average Units per Pupil	Total Number of Units	Average Units per Pupil	Total Number of Units	Average Units per Pupil
Social Science						
History						
American. . . .	244.5	.67	338.0	.64	582.5	.64
Ancient.	227.5	.62	307.0	.58	534.5	.59
English.	275.0	.75	367.0	.7	642.0	.71
Med & Mod. . .	187.5	.51	246.5	.47	434.0	.48
Civics	61.5	.17	101.0	.19	162.5	.18
Economics	7.5	.02	11.5	.02	19.0	.02
	1003.5	2.74	1371.0	2.60	2374.5	2.62
Practical Arts						
Home Economics						
Cooking	3.0	.005	372.5	.71	375.5	.41
Sewing	1.0	.003	293.0	.56	294.0	.32
Household Deco.	0	0	24.5	.047	24.5	.03
Manual Training						
Mech. Drawing	34.5	.09	0	0	34.5	.04
Printing	5.0	.01	0	0	4.0	.07
Shop work.	88.5	.24	0	0	88.5	.09
	131.0	.348	690.0	1.317	821.0	.90
Commercial Work						
Bookkeeping . .	52.5	.14	39.5	.007	92.0	.10
Com'l Law. . . .	32.0	.086	7.0	.001	39.0	.04
Com'l Arith. . . .	13.0	.035	13.0	.002	26.0	.03
Stenography . .	30.0	.08	32.0	.006	62.0	.07
	127.5	.34	91.5	.16	219.0	.24
Teacher Training						
Class Manage'nt	12.0	.032	27.5	.052	39.5	.04
Review work. .	.5	.001	4.0	.008	4.5	.00
Psychology . . .	2.0	.005	44.5	.084	46.5	.05
	14.5	.038	76.0	.144	90.5	.10

TABLE XXXII

TOTAL NUMBER OF HIGH SCHOOL UNITS COMPLETED BY THE GRADUATES.*

Boys.....256
Girls.....319

Total 575

	Boys		Girls		Total	
	Total Number of Units	Average Units per Pupil	Total Number of Units	Average Units per Pupil	Total Number of Units	Average Units per Pupil
English						
Literature	503.5	1.97	647.5	2.03	1151.0	2.0
Rhetoric	442.5	1.73	541.1	1.69	983.5	1.71
	946.0	3.7	1188.6	3.72	2134.5	3.71
Mathematics						
Algebra	426.5	1.66	522.0	1.64	948.5	1.65
Arithmetic	21.5	.08	52.0	.1	53.5	.09
Astronomy	3.5	.01	.5	.002	4.0	.007
Geometry	301.5	1.18	392.0	1.23	693.5	1.21
Surveying	4.5	.02	.5	.002	5.0	.009
Trigonometry .	34.5	.14	38.5	.12	73.0	.13
	792.0	3.09	985.5	3.09	1777.5	3.09
Foreign Languages						
Ancient						
Latin						
Grammar.. ..	206.5	.81	235.0	.74	441.5	.76
Caesar.....	176.0	.69	202.5	.64	378.5	.65
Cicero..... ..	90.0	.35	152.5	.48	242.5	.42
Virgil.....	66.5	.26	138.0	.43	204.5	.36
Greek	7.0	.03	20.0	.06	27.0	.05
Modern						
French.....	34.0	.13	63.0	.2	97.0	.17
German.....	138.5	.54	161.0	.5	299.5	.51
Spanish.....	43.0	.17	26.0	.08	69.0	.12
Total Languages	761.5	2.98	998.0	3.13	1759.5	3.04
Natural Science						
Agriculture ...	194.5	.78	27.5	.09	222.0	.39
Animal Husb...	3.0	.01	0	0	3.0	.006
Biology	108.0	.42	161.0	.5	269.0	.47
Botany	19.0	.07	50.5	.16	69.5	.12
Chemistry	141.0	.55	119.5	.37	260.5	.45
Geology	42.5	.17	48.5	.15	91.0	.16
Physics	181.5	.71	160.0	.5	341.5	.59
Physiography .	97.0	.38	76.5	.24	173.5	.3
Physiology	59.5	.23	112.5	.35	172.0	.3
Zoology	5.5	.02	17.5	.05	23.0	.04
	851.5	3.34	773.5	2.41	1625.0	2.83

*The data for this table were gathered from the Biennial Reports of the State Superintendent of Public Instruction of Tennessee for the year 1915-16.

TABLE XXXII (Continued)

	Boys		Girls		Total	
	Total Number of Units	Average Units per Pupil	Total Number of Units	Average Units per Pupil	Total Number of Units	Average Units per Pupil
Social Science						
History						
American....	166.0	.65	182.5	.57	348.5	.61
Ancient.....	85.0	.33	115.0	.36	200.0	.35
English.....	123.0	.48	218.0	.68	341.0	.59
General.....	108.0	.42	141.0	.44	249.0	.43
Med. & Mod..	91.0	.36	87.0	.27	178.0	.31
Civics	15.5	.06	16.0	.05	31.5	.05
Economics	7.0	.02	7.0	.02	14.0	.02
	595.5	2.32	766.5	2.39	1362.0	2.36
Practical Arts						
Home Economics						
Cooking	2.0	.008	249.0	.78	251.0	.44
Sewing	2.0	.008	178.0	.56	180.0	.31
Sanitation	0	0	10.5	.03	10.5	.02
Manual Training						
Manual training	67.5	.27	0	0	67.5	.12
Mech. drawing.	1.0	.004	0	0	1.0	.0
	72.5	.290	437.5	1.37	510.0	.9
Commercial Work						
Bookkeeping ..	37.0	.14	18.0	.05	55.0	.1
Com'l Arith....	55.0	.22	40.5	.13	95.5	.17
Com'l Law.....	6.5	.02	4.0	.01	10.5	.02
Stenography ..	32.0	.13	12.5	.04	44.5	.08
	130.5	.51	75.0	.23	205.5	.37
Teacher Training						
Psychology	3.5	.01	.5	.002	4.0	.007
Teach. Train...	5.0	.02	30.0	.09	35.0	.06
	8.5	.03	30.5	.092	39.0	.67
Miscellaneous						
Art	0	0	1.0	.003	1.0	.002
Drawing	0	0	2.0	.006	2.0	.004
Evid. of Christ	3.5	.01	.5	.002	4.0	.007
Logic	3.5	.01	.5	.002	4.0	.007
Music	0	0	2.0	.006	2.0	.004
	7.0	.02	6.0	.019	13.0	.024

It is plain from these figures that the seniors and graduates have spent the most of their time in high school on the formal subjects such as English, mathematics, foreign languages, and history*. In fact, only about one-fourth of all their time was spent on the natural sciences, practical arts work, commercial work, and teacher training work. It seems a farce for the pupils of these county high schools to spend only one-fourth of their time on the utilitarian subjects which function daily in their lives as farmers and farmers' wives, and the other three-fourths on the formal subjects, the chief aim of which is to prepare for college entrance, the life of the professions, or a life of cultured ease. Especially is this true when we realize that only a few out of every 100 freshmen ever remain in high school to become seniors and of these seniors only a small part ever go on to college after graduating from high school. Cubberley† in commenting on this situation, says, "All over our land today are high schools, located in villages which are the centers of distinctly rural communities, and which are offering only an old-style course of instruction. The chief result of such instruction, so far as it relates to the farm, is to stimulate the cityward tendency among the young people. Almost nothing relating to farm life is taught; almost everything relates to preparation for college, the life of the professions, or a life of cultured ease."

Not only do these tables set forth the atmosphere which has pervaded the high schools of Tennessee for the past seven years, but they also furnish us the basis of the judgments of the pupils regarding the course of study which the following pages contain.

It would be a very desirable thing to have a fourth table here giving the exact units of work completed by the quitters before they left high school. But those data are not to be had. However, we can say, with a high degree of certainty, that it would correlate very highly with tables XXXI and XXXII, since the graduates and seniors represent the few of the original one hundred freshmen who have fought the battles of four years high

*The term "formal" here applies to the way these subjects are usually taught.

†Cubberley, Rural Life and Education, p 278.

school and have come off victorious, while the quitters represent the great throng who dropped by the wayside. Since this is true, we are able to say, with a high degree of certainty, that what time the quitters were in high school they were studying the same subjects that their classmates, the seniors and graduates, were studying.

This short sketch of the growth and development of the rural high school of Tennessee, together with a discussion of the development of the course of study, has shown us what the general tendency of these high schools is; namely, that they are dominated by the classical and traditional spirit, notwithstanding the fact that much progress has been made along some lines. It also serves as a basis upon which the students express their opinions concerning the different subjects in the course of study, as will be found in the detailed discussion which follows.

In considering a detailed discussion of the second section which deals with the pupils' opinions regarding the different subjects in the course of study these questions were asked:

(a) Which subjects do you consider the most useful?
(b) Which subjects do you consider the least useful?
(c) Which subjects do you like the best?
(d) Which subjects do you want added to your high school?
(e) Which subjects, if added to your high school course, would cause you to want to return?

The answers to these questions were compiled in the form of tables which with proper explanation follow.

Tables XXXIII-XXXV have to do with subjects considered most useful; and tables XXXVI-XXXVIII have to do with subjects considered least useful by graduates, seniors and quitters respectively.

TABLE XXXIII

STUDIES CONSIDERED MOST USEFUL BY THE GRADUATES IN ORDER OF IMPORTANCE.*

Boys.....166
Girls.....222

Total 388

Subjects	Boys			Girls			Boys and Girls combined			Sum of ranks
	1st	2nd	3d	1st	2nd	3d	1st	2nd	3d	
	%	%	%	%	%	%	%	%	%	
Blank	2.8	0	.8	18.5	1.1	12.1	9.6	0	3.2	
English	44.4	25.8	22.2	41.2	27.0	16.2	44.2	26.8	19.0	29.8
Mathematics	22.2	22.4	9.0	14.4	23.9	18.5	17.5	24.0	14.1	20.4
History	1.8	8.4	12.6	4.5	11.3	16.2	3.5	10.1	14.3	9.4
Domestic Science	0	0	0	9.0	12.6	13.1	5.2	7.4	7.7	6.6
Latin	6.0	3.6	4.2	4.1	10.4	9.5	5.0	7.7	7.4	6.5
Physics	1.8	3.6	10.4	1.8	3.6	3.6	2.0	4.0	6.8	4.0
Agriculture	12.0	4.2	7.2	.9	.5	.9	6.0	2.0	4.0	3.8
Biology	0	5.4	8.4	1.8	2.7	3.6	1.0	4.0	5.4	3.5
Chemistry	1.8	4.8	4.8	1.4	1.4	0	1.5	2.9	2.0	2.2
Commerce	3.0	2.4	6.0	.5	1.4	.5	1.5	2.0	2.9	2.1
Civics	0	1.2	4.8	.5	.5	.5	.3	.8	2.3	1.1
Manual Training	2.4	1.2	3.6	0	0	0	1.0	.5	1.5	1.0
German	.6	1.2	1.2	0	1.3	1.3	.3	1.3	1.3	1.0
Botany	0	1.8	0	.5	.9	.9	.3	1.2	.5	.7
Teacher Training	0	.6	0	.9	.5	1.3	.5	.5	.8	.6
Physiology	0	.6	1.2	0	.5	1.4	0	.5	1.3	.6
Physical Geography	0	0	2.2	0	0	.9	0	0	1.0	.3
Spanish	0	1.2	.6	0	0	0	0	.5	.3	.3
Zoology	.6	0	.6	0	0	0	.3	0	.3	.2
French	0	0	0	0	.9	0	0	.5	0	.2
Drawing	.6	.6	0	0	0	0	.3	.3	0	.2
Economics	0	0	.6	0	.5	0	0	.3	.3	.1
Music	0	0	.6	0	0	0	0	0	.3	.1
Geology	0	0	0	0	0	.5	0	0	.3	.1

*The data for this table were compiled from the questionnaires filled by the graduates.

TABLE XXXIV

SUBJECTS CONSIDERED MOST USEFUL BY THE SENIORS IN ORDER OF IMPORTANCE.*

Boys.....344
Girls.....471

Total 815

Subjects	Boys			Girls			Boys and Girls combined			Sum of ranks
	1st	2nd	3d	1st	2nd	3d	1st	2nd	3d	
	%	%	%	%	%	%	%	%	%	
Blank	4.3	2.0	25.3	35.8	22.9	17.4	20.1	15.8	20.9	
Mathematics	18.0	21.8	17.1	12.4	17.2	15.1	14.5	18.8	15.7	16.8
English	37.2	21.5	4.4	11.3	10.7	12.8	21.5	14.9	9.1	15.5
Biology	12.8	16.9	10.5	6.9	9.9	8.8	9.2	12.5	9.2	10.7
Latin	11.0	11.3	9.6	10.9	10.1	8.8	10.8	10.4	9.0	10.3
History	4.6	8.4	9.9	5.5	11.5	16.0	5.1	10.0	13.2	9.7
Domestic Science	0	0	.6	10.3	7.8	7.8	5.9	4.4	4.7	5.1
Agriculture	1.7	3.2	4.4	.8	.2	1.5	1.2	1.4	2.6	2.6
Commerce	1.7	4.4	6.4	.8	.6	1.5	1.2	2.2	3.5	2.3
Chemistry	3.2	2.3	1.8	1.3	2.3	2.5	2.0	2.3	2.3	2.3
Physics	1.7	4.1	3.2	.4	.6	.6	1.0	2.0	1.6	1.6
Teacher Training	.6	0	.3	1.9	1.4	1.7	1.2	.8	1.1	1.5
Manual Training	2.6	2.0	3.8	0	0	.6	1.1	.8	1.9	1.3
German	.3	.9	.9	1.1	1.7	2.1	.7	1.3	1.5	1.2
French	0	0	.6	.4	1.7	2.4	.9	.9	1.7	.9
Writing	0	0	1.7	0	.4	.2	0	.2	.8	.4
Music	0	.3	0	.2	.2	.4	.1	.2	.2	.2
Physiology	0	0	.6	0	.4	.2	0	.2	.3	.2
Civics	.3	.6	0	0	0	0	.1	.2	0	.1
Gymnastics	0	.3	.3	0	.2	0	0	.2	.1	.1
Physical Geography	0	.3	0	0	0	.2	0	.1	.1	.1
Economics	0	.3	.3	0	0	0	0	.1	.1	.1
Spanish	0	.3	0	0	0	0	0	.1	0	.1
Drawing	0	0	0	.2	0	0	0	.1	0	.1

*The data for this table were compiled from the questionnaires filled by the seniors.

TABLE XXXV

SUBJECTS CONSIDERED MOST USEFUL BY THE QUITTERS IN ORDER OF IMPORTANCE.*

Boys.....285
Girls.....155

Total 440

Subjects	Boys			Girls			Boys and Girls combined			Sum of ranks
	1st	2nd	3d	1st	2nd	3d	1st	2nd	3d	
	%	%	%	%	%	%	%	%	%	
Blank	20.6	17.8	22.6	32.7	23.1	31.5	30.1	19.5	25.7	
English	21.7	35.4	39.6	38.4	33.2	19.5	27.8	34.7	32.9	31.2
Mathematics	38.5	25.2	10.2	11.7	18.2	22.8	26.2	23.0	14.7	21.9
History	1.8	3.2	6.7	2.7	9.8	5.2	2.0	5.5	6.2	4.5
Agriculture	7.7	7.0	6.0	0	0	0	5.1	4.6	3.8	4.4
Domestic Science	0	0	0	9.1	5.9	9.1	4.2	2.0	3.2	2.8
Biology	1.8	1.8	2.8	.7	1.9	5.2	1.4	1.8	3.6	2.3
Latin	2.5	1.4	2.1	1.9	1.9	1.3	2.3	1.6	1.8	1.9
Commerce	2.1	2.5	2.1	0	1.9	.7	1.4	2.3	1.6	1.7
Physics	.7	2.1	1.4	.7	0	0	.7	1.4	.9	1.0
Physiology	0	.7	2.1	.7	.7	1.3	.2	.7	1.8	.9
Physical Geography	.4	1.4	1.4	0	0	2.0	.2	.9	1.6	.9
Manual Training	1.1	1.1	1.4	0	0	0	.7	.7	.9	.8
Chemistry	.7	0	0	.7	1.3	0	.7	.5	0	.4
German	.4	0	.4	0	.7	.7	.2	.2	.5	.3
Music	0	0	0	0	.7	.7	0	.2	.2	.2
Botany	0	.4	.4	0	0	0	0	.2	.2	.2
French	0	0	0	.7	0	0	.2	0	0	.1
Drawing	0	0	.4	0	0	0	0	0	.2	.1
Gymnastics	0	0	.4	0	0	0	0	0	.2	.1
Teacher Training	0	0	0	0	.7	0	0	.2	0	.1

*The data for this table were compiled from the questionnaires filled by the quitters.

TABLE XXXVI

SUBJECTS CONSIDERED LEAST USEFUL BY THE GRADUATES IN ORDER OF IMPORTANCE.*

Boys.....166
Girls.....222

Total 388

Subjects	Boys			Girls			Boys and Girls combined			Sum of ranks
	1st	2nd	3d	1st	2nd	3d	1st	2nd	3d	
	%	%	%	%	%	%	%	%	%	
Blank	.6	14.8	39.4	16.4	24.0	33.8	8.3	18.4	33.7	
Mathematics	12.6	13.8	1.8	22.5	23.0	17.1	18.5	19.3	10.3	17.9
Latin	31.8	4.8	4.8	14.5	9.0	7.2	22.1	7.4	6.2	11.9
History	13.8	14.4	10.2	6.8	8.0	5.0	10.0	10.9	8.4	10.3
Physics	3.6	6.0	3.6	10.8	8.5	8.6	7.9	8.1	6.5	7.4
German	6.6	7.8	4.2	9.0	6.3	5.4	8.1	7.1	4.8	6.6
Chemistry	3.6	3.6	4.2	4.5	4.9	5.4	4.2	4.4	4.8	4.5
French	3.0	5.4	3.0	2.7	2.7	3.8	2.9	3.9	3.4	3.4
Biology	4.2	3.6	2.4	4.5	1.8	2.7	4.4	2.6	2.6	3.2
English	7.8	7.2	4.2	.5	1.4	0	3.6	3.9	1.8	3.1
Zoology	.6	2.4	1.8	.9	1.8	.9	.8	2.1	1.2	1.4
Botany	1.8	1.8	2.4	1.3	.5	.9	1.5	1.0	1.5	1.4
Physical Geography	1.2	2.4	.6	.5	1.8	1.8	.8	2.1	1.3	1.4
Geology	.6	1.2	3.6	0	.9	.9	.3	1.0	2.0	1.1
Commerce	2.4	1.8	.6	.5	1.4	0	1.2	1.5	.3	1.1
Agriculture	.6	2.4	1.2	0	.5	1.8	.3	1.3	1.5	1.1
Domestic Science	0	0	0	2.3	.9	1.8	1.3	.5	1.0	1.0
Physiology	1.8	2.4	0	1.3	0	.5	1.5	1.0	.3	1.0
Civics	1.2	1.2	1.2	.5	0	.9	.8	.5	1.0	.8
Spanish	1.8	.6	1.8	.5	0	.5	1.0	.3	1.5	.7
Drawing	1.6	1.2	.6	.5	.5	0	.5	.8	.3	.5
Manual Training	0	.6	1.2	0	0	0	0	.3	.5	.3
Greek	0	0	0	0	.9	.5	0	.5	.3	.3
Economics	0	0	.6	0	.9	0	0	.5	.3	.3
Music	0	.6	.6	0	.5	.5	0	.3	.5	.3
Teacher Training	0	0	0	0	.5	0	0	.3	0	.1

*The data for this table were compiled from the questionnaires filled by the graduates.

TABLE XXXVII

SUBJECTS CONSIDERED LEAST USEFUL BY THE SENIORS IN ORDER OF IMPORTANCE.*

Boys.....344
Girls.....471

Total 815

Subjects	Boys			Girls			Boys and Girls combined			Sum of ranks
	1st	2nd	3d	1st	2nd	3d	1st	2nd	3d	
	%	%	%	%	%	%	%	%	%	
Blank	41.1	35.5	52.4	21.9	33.3	54.2	31.4	37.4	55.6	
Latin	5.5	6.7	7.5	25.8	12.6	2.5	17.0	10.0	4.6	10.8
Mathematics	8.4	4.9	3.5	12.2	7.8	6.1	10.4	6.5	4.9	7.5
History	12.2	10.4	4.0	4.2	8.6	5.5	7.3	9.2	4.8	7.3
Domestic Science	5.2	3.2	3.8	5.5	5.9	5.5	5.3	3.7	3.7	5.0
Biology	5.2	4.6	3.2	9.9	7.1	2.9	7.8	6.0	3.0	5.7
German	3.2	3.2	3.8	3.2	5.7	4.8	3.1	4.7	4.3	4.1
Agriculture	4.6	8.4	3.5	2.3	1.9	2.1	3.2	4.6	2.6	3.2
Physics	1.2	1.7	2.0	3.4	4.6	3.0	2.4	3.4	2.5	2.8
Manual Training	5.2	2.6	1.2	2.5	1.7	3.4	3.6	2.0	2.4	2.7
Commerce	2.6	4.3	1.7	3.6	2.3	1.3	3.1	3.1	1.4	2.7
French	.6	3.5	2.6	1.4	1.9	1.7	1.1	2.5	2.0	1.9
Chemistry	1.2	2.6	.8	2.1	2.1	1.3	1.7	2.3	1.1	1.7
English	1.4	4.8	3.9	0	.2	1.2	.6	1.9	2.3	1.6
Greek	.9	.9	.6	.4	.2	.6	.6	.5	.6	.6
Spanish	0	.3	1.5	.4	.2	.4	.2	.2	.8	.5
Physiology	.6	.3	.3	.6	.4	.2	.6	.4	.2	.4
Music	.6	.6	.8	0	.6	.3	.2	.5	.5	.4
Drawing	0	.3	1.5	0	.3	.6	0	.2	.8	.4
Zoology	0	.3	.5	.2	0	.6	.1	.1	.6	.3
Physical Geography	0	.3	0	.4	.4	.4	.2	.4	.2	.3
Botany	.3	.3	0	0	.2	.4	.1	.2	.2	.2
Economics	0	0	0	0	0	.8	0	0	.5	.2
Civics	0	0	.3	0	0	0	0	.1	.1	.1
Gymnastics	0	.3	.3	0	0	0	0	.1	.1	.1
Teacher Training	0	0	.3	0	0	.2	0	0	.2	.1

*The data for this table were compiled from the questionnaires filled by the seniors.

TABLE XXXVIII

SUBJECTS CONSIDERED LEAST USEFUL BY THE QUITTERS IN ORDER OF IMPORTANCE.*

Boys.....285
Girls.....155

Total 440

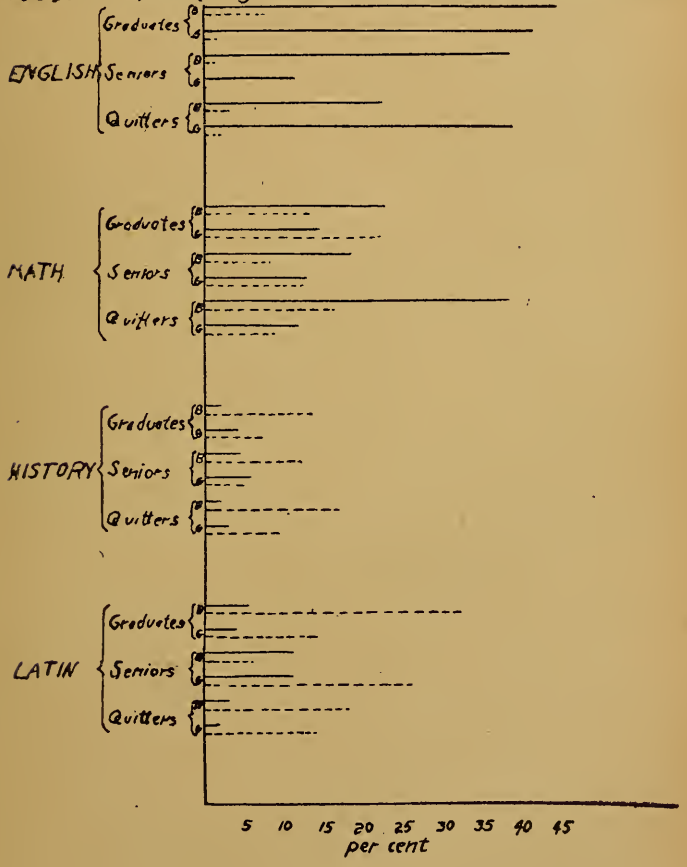
Subjects	Boys			Girls			Boys and Girls combined			Sum of ranks
	1st	2nd	3d	1st	2nd	3d	1st	2nd	3d	
	%	%	%	%	%	%	%	%	%	
Blank	25.2	49.5	60.9	53.4	56.1	70.8	35.0	51.1	64.1	
History	16.6	9.8	5.6	9.6	9.7	5.2	14.3	9.9	5.6	9.7
Mathematics	16.1	8.1	4.9	9.1	8.5	5.2	13.8	8.3	5.1	8.9
Latin	17.5	5.6	4.5	14.9	5.8	3.8	16.8	5.8	4.4	8.8
Biology	7.7	5.2	2.4	7.1	4.6	3.8	6.8	5.1	3.0	5.1
English	3.8	6.3	5.2	1.3	3.8	1.3	3.0	5.6	3.9	4.0
Physical Geography	1.4	3.5	3.5	0	1.9	1.3	.9	3.0	2.9	2.2
Physics	1.1	2.1	3.2	1.3	.7	2.6	1.2	1.6	3.0	1.9
Commerce	2.1	1.8	.7	1.3	1.3	.7	1.8	1.6	.7	1.4
German	1.4	1.4	1.8	0	0	.7	.9	.9	1.3	1.0
Agriculture	1.1	1.1	1.1	0	1.3	1.9	.7	1.2	1.3	1.0
Botany	1.0	.1	.4	1.3	.7	1.3	1.2	.9	.7	.9
Physiology	.7	1.0	1.4	0	.7	0	.5	.9	.9	.8
French	1.1	1.4	0	0	1.3	0	.7	1.3	0	.7
Chemistry	.7	0	1.7	0	.7	.7	.5	.2	1.3	.7
Zoology	.7	.7	.4	.7	1.3	.7	.7	.6	.5	.6
Drawing	.7	1.0	.4	0	0	0	.5	.4	.2	.5
Manual Training	0	.7	1.1	0	0	0	0	.5	.7	.4
Music	.7	.7	0	0	0	0	.5	.5	0	.3
Domestic Science	0	0	0	0	.7	0	0	.2	0	.1
Spanish	0	0	.4	0	0	0	0	0	.2	.1
Teacher Training	.4	0	0	0	0	0	.2	0	0	.1
Gymnastics	0	0	.4	0	0	0	0	0	.2	.1

*The data for this table were compiled from the questionnaires filled by the quitters.

Probably some of the more prominent features of these six tables can best be presented in the form of a graph. In graph I, which follows, only thirteen subjects are considered since they are the ones of most importance in this connection. The continuous lines in graph I represent the per cent of graduates, seniors, and quitters respectively who named the subject as most important; and the dotted lines represent the per cent of graduates, seniors, and quitters respectively who name the subjects as least useful. B indicates boys and G indicates girls.

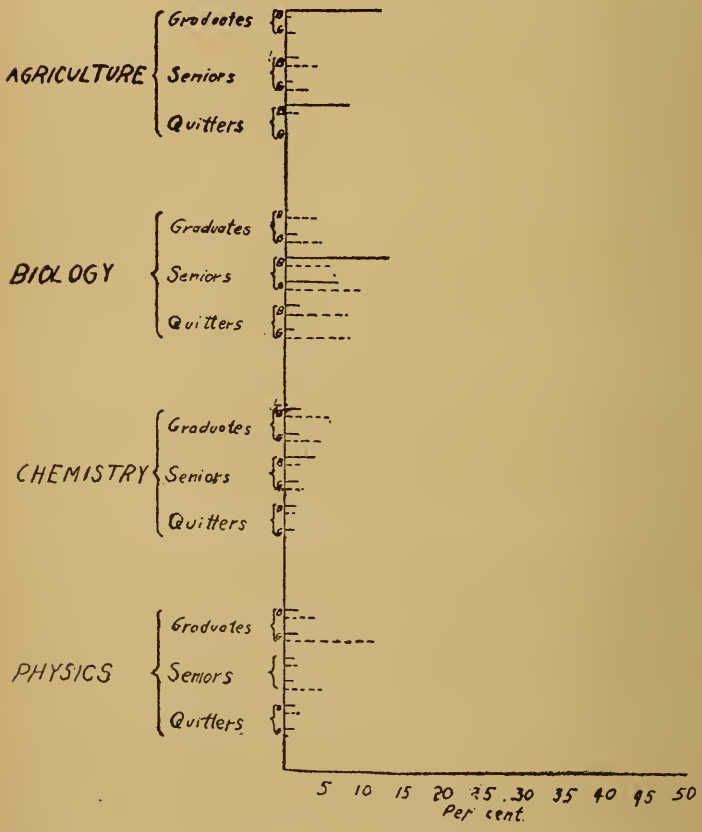
GRAPH I

Graphic comparison of the per cents of pupils naming various subjects as most useful and as least useful (Only first choice used here.)



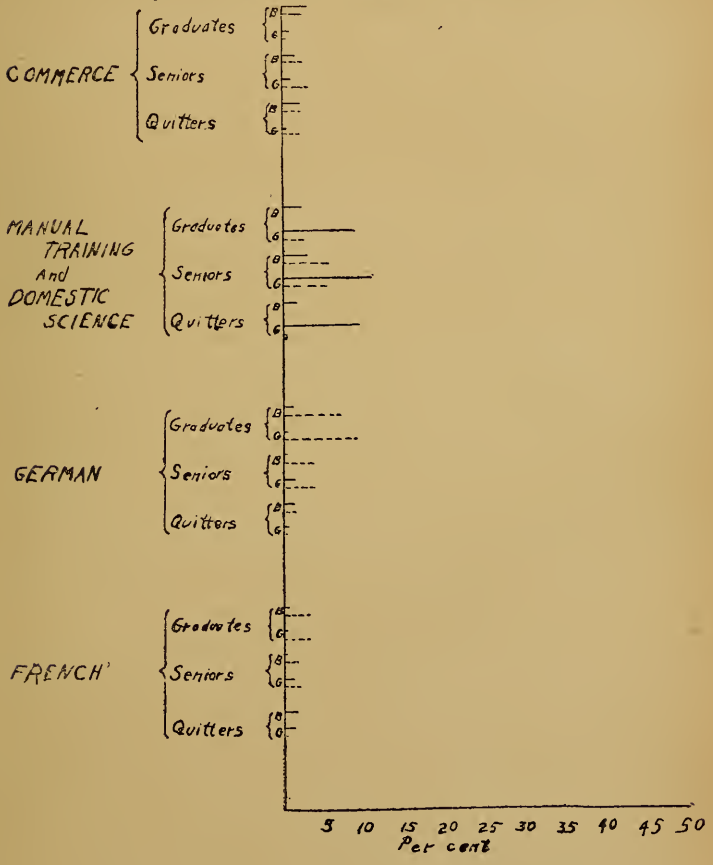
GRAPH I (Continued)

Graphic comparison of the percents of pupils naming various subjects as most useful and as least useful. (Only first choice used here)



GRAPH I (Continued)

Graphic comparison of the per cents of pupils naming various subjects as most useful and as least useful. (Only first choice used here)



A study of the preceding graph suggests several interesting comparisons of the per cents recorded in tables XXXIII-XXXVIII. It will be noticed that there is for English, agriculture, manual training, and domestic science an inverse relationship between the length of the lines which represent the most useful and of those which represent the most useless. Thus, in the case of these the continuous lines are very long while the dotted lines are very short. In the case of history, Latin, biology, physics, German, and French the reverse condition is shown. In the case of these the dotted lines are very long while the continuous lines are very short. That this inverse relationship does not exist in case of all subjects is made clear by a study of the graphs of mathematics, chemistry, and commerce. In these, both lines are of approximately the same length, indicating that the opinions of the pupils concerning them are about equally divided. If all the other subjects in the six tables were graphed, it would be seen that both the continuous and dotted lines would be very short, indicating that the subjects are apparently regarded as neither highest nor lowest in utility. For this reason it was not thought necessary to graph them at all.

This graph enables one to compare readily the rating given the thirteen various subjects on the basis of utility and uselessness, whether he wishes to compare the ratings given by the boys or by the girls of different groups, or by the boys and girls of the same group.

In order to make a strictly, scientific, statistical study of this material, it would be necessary in each instance to know how many people taking a subject named it as most useful or least useful, but since it was practically impossible to obtain that information these tables and graphs are presented for the purpose of showing where the stress is being laid in the course of study.

The fact that the majority of all the pupils confine their opinions to either English, mathematics, history, or Latin as most useful or least useful but corroborates the statement made on page 91 that the majority of the time of all the students is spent on the formal subjects. Their opinions are confined largely to these because their time is nearly all taken up with subjects which have to do mainly with college entrance. As a result little time or opportunity is left for anything else.

We may be safe in saying that the shortness of the lines as in the case of manual training, commerce, domestic science, etc., is not due to the fact that the students do not consider these subjects as important but rather to the small per cent of students having opportunity of taking them, and the question here is confined to subjects that the pupils have taken. In this study of the graph of these subjects we should note the relation between dotted and continuous lines for each subject rather than the length of these lines as compared to those of other subjects. This being the case, we judge from the graph that the majority of the students taking agriculture, home economics, and manual training consider them as most useful. This is strikingly true in the case of the quitters and graduates.

In conclusion, we can say that the opinions of the students are confined, in the main, to the four subjects of English, mathematics, history and Latin; that in the case of English there seems to be little doubt in the minds of the pupils as to its usefulness; that in the case of mathematics the opinion seems about equally divided with the exception of the quitter boys who perhaps feel the necessity of practical arithmetic in their daily work (it will be remembered that 18.2 per cent of them are clerking); that in the case of history and Latin the number who consider these subjects as most useless far exceeds the number considering it most useful; and that the great majority of the pupils who have an opportunity to take the practical and utilitarian subjects name them as most useful.

The tables having to do with the subjects liked best are closely related to the topic of usefulness and follow next in this discussion. In this instance it was thought best to obtain responses only from the two extreme groups, the graduates who finished the high school, and the quitters who left without finishing.

As in the case of the subjects considered most useful and least useful, graphs are employed here also to make the facts in the case more evident. However, in graph II the continuous and dotted lines do not represent opposite conditions as in graph I, but, on the contrary, they both represent per cents of students naming subjects liked best, the continuous lines showing the per cent of boys, the dotted lines the per cent of girls. B indicates boys and G indicates girls. The tables and graph follow.

TABLE NO. XXXIX

SUBJECTS LIKED BEST BY GRADUATES IN ORDER OF IMPORTANCE.*

Boys.....166
Girls.....222
Total 388

Subjects	Boys			Girls			Boys and Girls combined			Sum of ranks
	1st	2nd	3d	1st	2nd	3d	1st	2nd	3d	
	%	%	%	%	%	%	%	%	%	
Blank	5.2	1.0	2.2	3.2	5.5	11.5	4.1	.6	5.3	
English	21.6	22.8	16.2	46.8	19.3	10.4	36.4	21.1	13.0	23.3
Mathmetics	34.2	23.4	17.4	13.0	16.4	10.8	22.4	19.5	13.8	18.4
History	10.2	12.0	16.2	5.8	13.0	13.0	8.1	12.7	13.9	11.6
Biology	1.8	6.6	4.2	11.7	13.5	19.8	7.5	10.7	13.3	10.4
Latin	3.6	3.0	7.2	8.2	9.9	10.4	6.2	7.0	9.1	7.4
Physics	3.6	9.0	9.6	.9	2.7	4.1	2.1	5.5	6.5	4.7
Chemistry	6.0	4.2	6.0	3.2	1.8	4.1	4.4	2.9	4.9	4.1
German	.6	4.2	2.4	1.4	6.3	6.3	1.0	5.2	4.6	3.6
Agriculture	10.8	4.8	3.6	.5	.9	1.4	4.9	4.5	2.3	3.3
French	1.8	1.2	1.8	1.8	4.5	2.3	1.8	3.1	2.1	2.3
Commerce	1.8	4.8	4.2	.5	.5	1.8	1.0	2.3	4.5	2.0
Manual Training	1.8	0	3.0	0	0	0	1.0	0	1.8	.8
Civics	.6	0	1.8	0	.9	.9	.3	.9	1.3	.7
Teacher Training	0	0	0.	.5	1.8	1.3	.3	1.0	.8	.7
Spanish	1.2	1.2	.6	.5	.5	0	.8	.8	.2	.6
Greek	0	1.2	0	.9	.5	.5	.5	.8	.3	.5
Economics	0	0	1.2	.5	.5	.9	.3	.3	1.0	.5
Zoology	0	.6	.6	0	.5	.5	0	.5	.5	.3
Physical Geography	.6	0	.6	0	.5	0	.3	.3	.3	.3
Geology	0	0	1.2	0	.5	0	0	.3	.5	.3

*The data for this table were compiled from the questionnaires filled by the graduates.

TABLE XL

SUBJECTS LIKED BEST BY THE QUITTERS IN ORDER OF IMPORTANCE.*

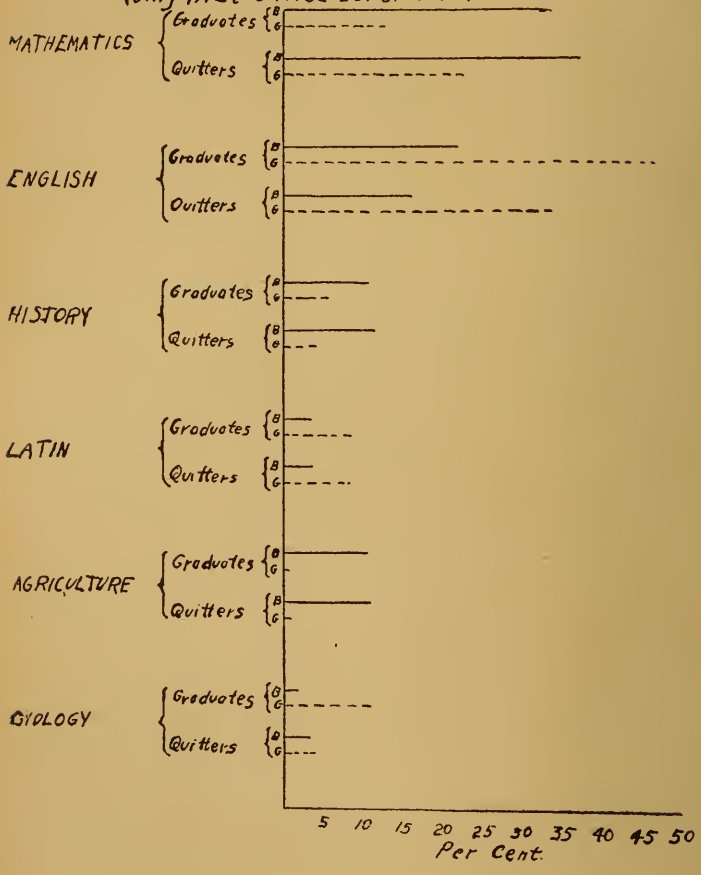
Boys.....285
Girls.....155
Total 440

Subjects	Boys			Girls			Boys and Girls combined			Sum of ranks
	1st.	2nd	3d	1st	2nd	3d	1st	2nd	3d	
	%	%	%	%	%	%	%	%	%	
Blank	9.5	9.0	14.3	16.1	10.2	.2	11.0	9.0	9.2	
English	16.8	31.9	31.2	33.8	29.2	21.5	23.0	31.3	28.1	26.9
Mathematics	37.8	26.3	9.5	23.4	16.2	32.5	33.1	23.0	17.7	24.1
History	11.6	10.1	11.2	4.5	14.2	12.4	9.2	11.3	11.3	10.7
Agriculture	10.1	4.6	10.1	0	.7	0	6.7	3.2	6.7	5.4
Latin	3.9	3.5	4.6	7.1	9.8	7.8	5.0	5.7	5.7	5.4
Biology	3.2	3.2	6.7	3.9	5.9	9.8	3.5	4.1	7.4	4.9
Domestic Science	0	0	0	7.8	7.8	8.5	2.8	2.8	3.0	2.8
Commerce	2.1	2.1	3.7	.7	.7	0	1.6	1.6	2.5	1.9
Physics	2.1	3.7	1.4	0	0	1.3	1.3	2.5	1.4	1.7
Physical Geography	.7	1.4	2.1	.7	1.3	1.3	2.0	1.3	1.8	1.2
Chemistry	1.4	.7	1.4	1.3	.7	0	1.3	.7	.9	1.0
German	2.7	.4	.4	2.0	1.3	2.0	1.1	.7	.9	.9
French	0	.4	1.3	0	1.3	2.0	0	.7	1.3	.7
Manual Training	.4	.7	1.7	0	0	0	.2	.5	1.1	.6
Zoology	0	1.3	0	0	.7	.7	0	.9	.2	.4
Botany	0	.7	.4	0	0	0	0	.5	.2	.2
Music	0	0	0	.7	0	0	.2	0	0	.1
Civics	0	.4	0	0	0	0	0	.2	0	.1

*The data for this table were compiled from the questionnaires filled by the quitters.

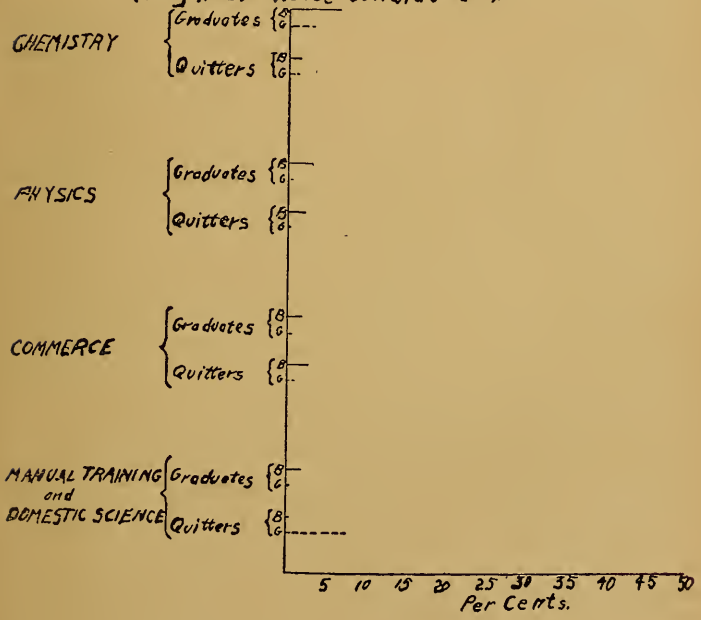
GRAPH II

Graphic comparison of per cents of Graduates and Quitters naming the subjects liked best (Only first choice considered)



GRAPH II (Continued)

Graphic comparison of per cents of Graduates and Quitters naming the subjects liked best. (Only first choice considered).



The most prominent feature of graph II is the fact that the four leading subjects mentioned as liked best are the same as the four leading subjects in graph I, mentioned as the most useful or least useful. A scientific correlation might be well worked out here, but, as has been indicated throughout, the purpose of this study is to show the large tendencies which have to do with the problem of rural high school education in Tennessee.

The fact that these same four subjects head the list in this graph, as in the previous graph, may be explained in the same way as the other graph was explained; namely, that the majority of the students' time is spent on these four subjects. The course of study which was prescribed by the State High School Inspector of Tennessee at the time fixed ten of the sixteen units required for graduation. They were as follows: English four; mathematics three; science two; and history one. That is to say, one-half of the time of all the students had to be spent on English, mathematics, and history. Table XXXII, which gives the high school units completed by the graduates, shows that on an average each student completed 3.71 units of English, 3.09 units of mathematics, 3.04 units of foreign languages, and 2.36 units of social science, making a total of 12.2 units or over three-fourths of their entire work. Table XXXI, which gives the high school units completed by the seniors, shows a total of 12.47 units of work done in these same four subjects.

Although foreign language is not among the ten units required by the state course, yet we find it ranking high in both tables showing high school units completed by graduates and seniors. This is probably due to the fact that the majority of the higher institutions of learning in the state have a foreign language entrance requirement. Especially is this true of Vanderbilt University, which has played a very prominent role in high school development in Tennessee.

One other thing should be considered in this connection in determining the basis on which the students express opinions regarding the course of study. The statement was made in the historical sketch at the beginning of this chapter that many of these country high schools were at one time private academies, and in a sense preparatory schools for higher institutions of

learning. In fact, many of them were Vanderbilt Training Schools serving as feeders for the university proper. Consequently, when they were converted into county high schools the classical and traditional spirit which dominated them continued to exist. The change really was little more than one of name.

It is not hard for one to see the strong hold which traditional education has upon the Tennessee high schools. The students are judging the course of study in terms of the subjects which they have taken in high schools. We have shown that these subjects, for more reasons than one, are mainly classical. It is an unquestionable fact that, for the great majority of the students, the question of a high-school education, as a direct and specific preparation for participation in the vocational activities of the communities in which they live, has scarcely entered into their thinking.

This section of the chapter is concluded with a study of the subjects the pupils want added to their high school program of studies. In the study of the subjects thought most useful, least useful, and liked the best the pupils' opinions were confined to the subjects which they had taken in the high school; while in this section they were not limited in their choice. One way of testing, in a measure, the functioning of these high schools is to ascertain from the pupils themselves which subjects they want added to their school course. If they feel that they are getting what they want and need in the high school, it should find expression here. If, on the other hand, they feel the need of subjects not found in their high school course, this too should find expression here. The answers to the question might be of help to the administrator in planning the program of studies since it should offer suggestions concerning the type of work the pupils feel should be offered in their high schools.

Several graphs are used in this section. After each table, giving the subjects which a group want added, a graph is presented. Two graphs are employed to express the facts contained in that table a little more vividly. For comparative purposes the boys and girls are graphed separately. At the conclusion of the three tables with their graphs another graph is employed which combines all three of the groups, yet retaining the boys and

girls separately for comparative purposes. Only fourteen subjects are considered here as they are the ones of chief importance. The continuous lines represent the boys and the dotted lines represent the girls. B indicates boys and G indicates girls.

The tables containing the subjects the various groups want added together with the graphs follow.

TABLE XLI

SUBJECTS THE GRADUATES WANT ADDED TO THEIR HIGH SCHOOL COURSE.*

Boys.....166
Girls.....222

Total 388

Subjects	Boys %	Girls %	Total %
Commerce	37.2	13.5	23.9
Manual Training	22.2	21.6	22.1
French	6.0	23.9	16.4
Teacher Training	7.2	20.7	15.0
Agriculture	18.0	8.1	12.5
Domestic Science	1.2	17.5	10.7
Spanish	7.8	11.7	10.1
German	6.0	11.3	8.6
Chemistry	13.2	5.0	8.6
English (more)	8.4	8.6	8.6
Physical Education	4.2	8.6	6.9
Music	3.6	9.0	6.9
Art	0	13.1	7.5
Expression	3.6	8.5	6.5
Theology	4.8	4.1	4.4
History (more)	2.4	5.0	3.9
Astronomy	2.4	4.5	3.6
Physics	4.2	2.7	3.4
Military Training	7.8	0	3.4
Spelling	4.8	1.8	3.0
Practical Arithmetic	2.4	3.1	3.0
Latin (more)	3.6	2.3	2.8
Hygiene	3.0	2.3	2.6
Botany	3.0	2.3	2.6
Geology	1.8	2.7	2.3
Greek	1.2	3.1	2.3
Mechanical Drawing	4.8	.5	2.3
Biology	1.8	2.2	2.0
Phys. Geography	2.4	1.8	2.0
Trigonometry	3.0	.9	1.8

*The data for this table were compiled from the questionnaires filled by the graduates.

TABLE XLI (Continued)

Subjects	Boys %	Girls %	Total %
Economics	2.4	.9	1.5
Civics	1.8	.9	1.3
Current Events	1.8	.9	1.3
Sociology	.6	1.3	1.0
Engineering	2.4	0	1.0
Algebra (more)	.6	.9	.8
Logic	1.8	0	.8
Chemical Laboratory	1.8	0	.8
Phys. Laboratory	1.8	0	.8
Mental Arithmetic	.6	.9	.8
Nature Study	0	1.3	.8
American Literature	0	.9	.5
Millinery	0	.9	.5
Nursing	0	.9	.5
Mythology	.6	.5	.5
Library Training	.6	.5	.5
Debating	1.2	0	.5
School Sanitation	0	.5	.3
Basketry	0	.5	.3
Vocational Training	.6	0	.3
Surveying	.6	0	.3
Ancient Literature	0	.5	.3
Road Building	.6	0	.3
Modern Drama	0	.5	.3
Etiquette	.6	0	.3
Solid Geometry	.6	0	.3
Architect	.6	0	.3
Blacksmithing	.6	0	.3
Hebrew	.6	0	.3
Ethics	.6	0	.3
Sacred History	0	.5	.3
Camp Cookery	.6	0	.3
Analytical Geometry	0	.5	.3
Spherical Trigonometry	0	.5	.3
Descriptive Geometry	0	.5	.3
Differential Calculus	0	.5	.3
Landscape Gardening	.6	0	.3
Biography	.6	0	.3
Anthropology	0	.5	.3

GRAPH III

Graphic comparison showing per cents of Graduate Boys wanting various subjects added to the High School Course of Study

GRAPH IV

Graphic comparison showing per cents of Graduate Girls who want various subjects added to the High School Course of Study.

TABLE XLII

SUBJECTS THE SENIORS WANT ADDED TO THEIR HIGH SCHOOL COURSE.*

Boys.....344
Girls.....471

Total 815

Subjects	Boys %	Girls %	Total %
French	15.4	39.3	28.8
Commerce	35.4	21.2	26.8
Manual Training	33.3	21.2	25.6
Spanish	17.1	27.9	22.9
Physical Education	14.3	18.7	16.7
Expression	11.1	13.2	12.0
Military Training	21.9	4.8	11.4
German	6.6	12.4	9.7
Music	4.8	13.2	9.5
Domestic Science	2.4	12.6	8.2
Teacher Training	7.8	8.4	7.9
Agriculture	9.3	6.7	7.6
Art	7.5	11.8	9.8
Greek	2.7	4.1	5.2
Chemistry	7.8	3.4	5.0
Astronomy	4.5	3.8	4.0
Bible	1.2	4.8	3.2
Writing	5.0	1.7	3.0
Trigonometry	3.5	.8	1.9
Physics	2.4	.8	1.4
English (more)	1.8	.8	1.2
Mythology	0	2.1	1.2
Science (more)	1.5	.8	1.1
Economics	1.8	.6	1.1
Botany	.9	1.1	1.0
Spelling	.6	1.1	.8
Italian	0	1.5	.8
Physiology	1.2	.6	.8
Business Arithmetic	.3	.8	.6
Engineering	1.5	0	.6
History, U. S.	.9	.5	.6
Arithmetic	1.2	.2	.7
Business English	.9	.2	.5
Mechanical Drawing	.9	.2	.5
Geology	.6	.4	.5
Drafting	1.2	0	.5
Civics	.6	.2	.4
Mining Engineering	.9	0	.4
Fire Drill	.3	.4	.4
Physical Geography (more)	.6	.2	.4
Vocational Training	.6	.2	.4
Vocational Guidance	.4	.3	.4

*The data for this table were derived from questionnaires filled by the Seniors.

TABLE XLII (Continued)

Subjects	Boys %	Girls %	Total %
Telegraphy (wireless)	.6	0	.2
Mechanics	.6	0	.2
Solid Geometry	0	.4	.2
Biology	.3	.2	.2
Current Events	.3	.2	.2
Engineering (mechanical)	.6	0	.2
Latin (more)	.3	0	.1
History	0	.2	.1
Metalurgy	.3	0	.1
Industrial Course	0	.2	.1
Machine and Metal work	.3	0	.1
Parliamentary Law	.3	0	.1
Civil Engineering	0	.2	.1
Banking	.3	0	.1
Sociology	.3	0	.1
French History	0	.2	.1
Blacksmithing	.3	0	.1
Telegraphy	.3	0	.1
Medicine	.3	0	.1
Journalism	.3	0	.1
Home Nursing	0	.2	.1
Electrical Tests	.3	0	.1

GRAPH V

Graphic comparison showing per cents of Senior boys who want various subjects added to the High School Course of Study.

GRAPH VI

Graphic comparison showing per cents of Senior Girls who want various Subjects added to the High School Course of Study.

TABLE XLIII

SUBJECTS IF ADDED TO THE COURSE WOULD CAUSE THE QUITTERS TO WANT TO GO BACK TO HIGH SCHOOL.*

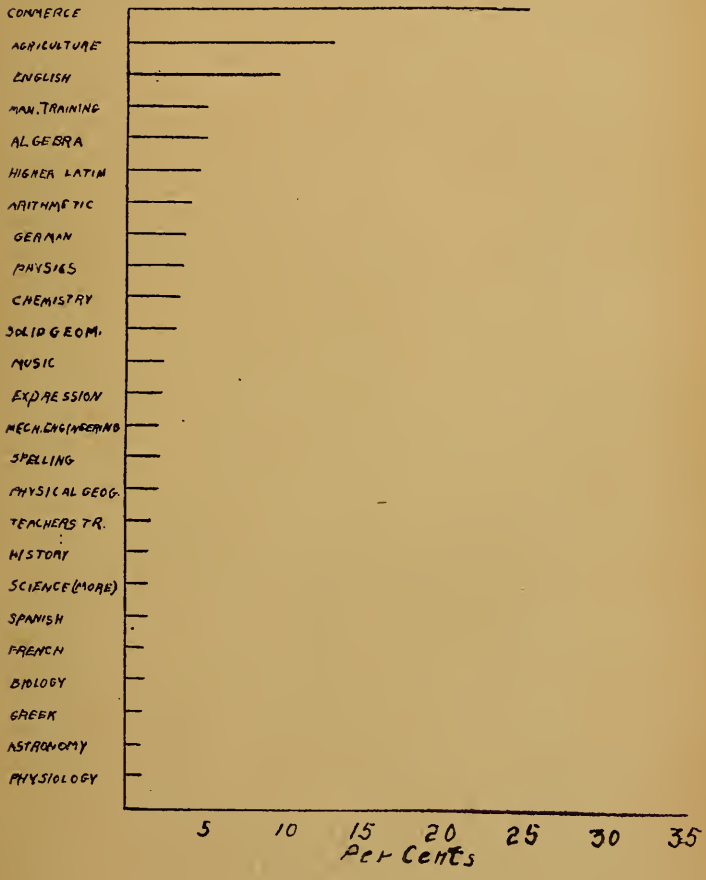
Boys.....285
Girls.....155
Total.....440

Subjects	Boys %	Girls %	Total %
Commerce	23.8	7.2	18.2
English	9.1	5.9	8.1
Agriculture	13.3	2.0	9.4
Domestic Science	0	17.6	6.2
German	3.9	4.6	5.5
Higher (Latin)	4.6	6.5	5.2
Algebra (more)	5.0	2.6	4.1
Chemistry	3.5	4.6	3.9
Manual Training	5.0	1.3	3.6
Physics	3.9	2.6	3.5
Arithmetic	4.3	0	2.8
Science (more)	1.4	4.6	2.5
Music	2.1	4.6	3.0
Solid Geometry	2.8	1.3	2.3
History	1.4	3.3	2.1
Expression	2.1	2.6	2.3
French	1.1	3.3	1.8
Spelling	2.1	.7	1.6
Spanish	1.4	1.3	1.4
Physical Geography	2.1	0	1.4
Biology	1.1	1.9	1.4
Mechanical Drawing	2.1	0	1.4
Greek	1.1	.7	.9
Art	.4	2.0	.9
Astronomy	1.1	0	.7
Physiology	1.1	0	.7
Engineering	1.1	0	.7
Teacher Training	1.4	0	.9
Political Economy	.7	.7	.5
Botany	1.1	0	.7
Drafting	.7	0	.4
Bible	.4	.7	.5
Physical Education	.4	.7	.5
Civil Engineering	.7	0	.4
Law	.7	0	.4
Grammar	.7	0	.4
Classics	0	.7	.2
Civics	0	.7	.2
Medicine	.7	0	.4
Zoology	0	.7	.2
Banking	.7	0	.4
School Spirit	.7	0	.4
Journalism	.4	0	.2
Electricity	.4	0	.2
Arabic Language	.4	0	.2
Common Law	.4	0	.2

*The data for this table were derived from the questionnaires filled by the quitters.

GRAPH VII

Graphic comparison showing per cents of Boys who quit High School wanting various subjects added to the Course of Study.

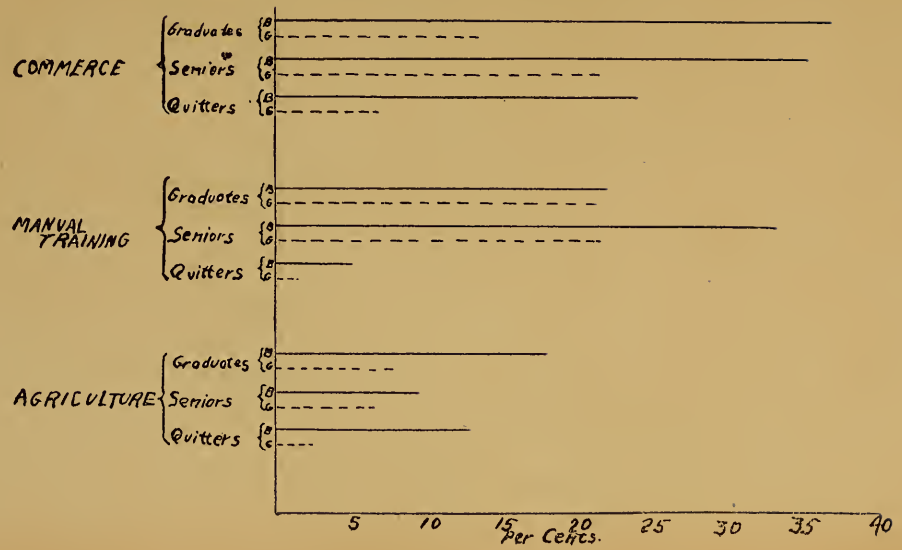


GRAPH VIII

Graphic comparison of per cents of Girls who quit High School, wanting various subjects added to the Course of Study.

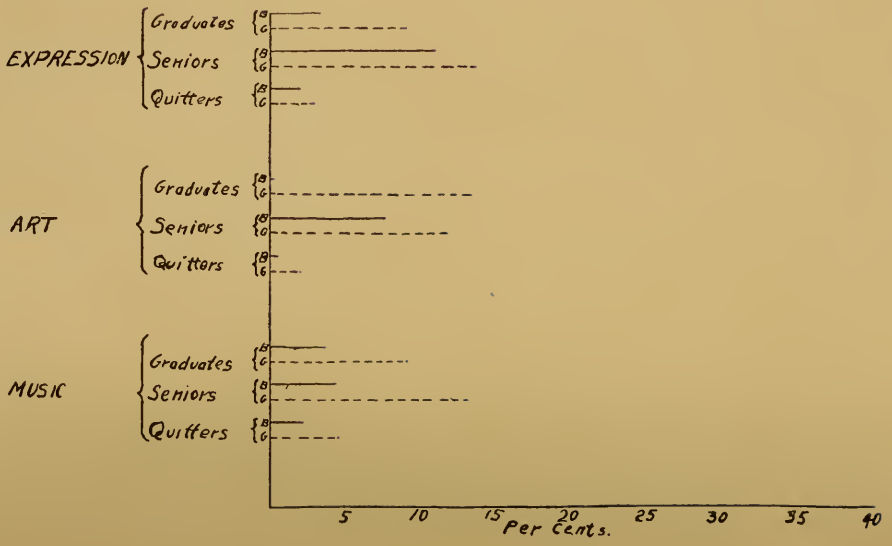
GRAPH IX

Graphic comparison of per cents of three groups of pupils wanting various subjects added to the High School Course of Study.



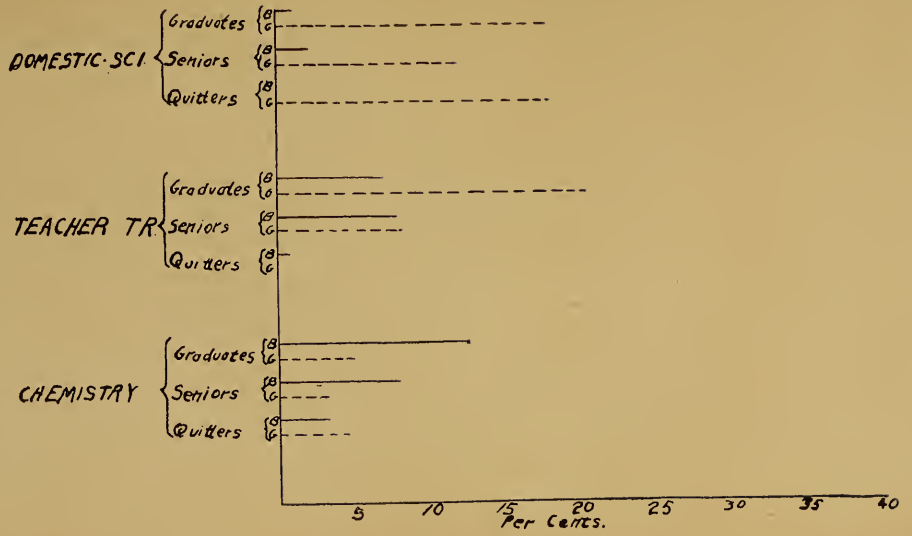
GRAPH IX (Continued)

Graphic comparison of per cents of three groups of pupils wanting various subjects added to the High School Course of Study



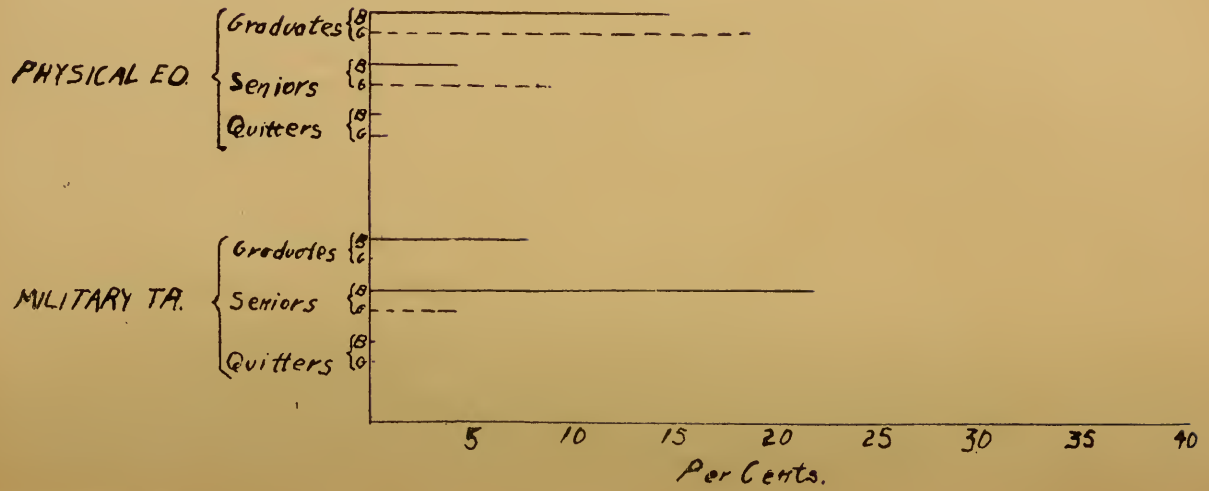
GRAPH II (Continued)

Graphic comparison of per cents of three groups of pupils wanting various subjects added to the High School Course of Study.



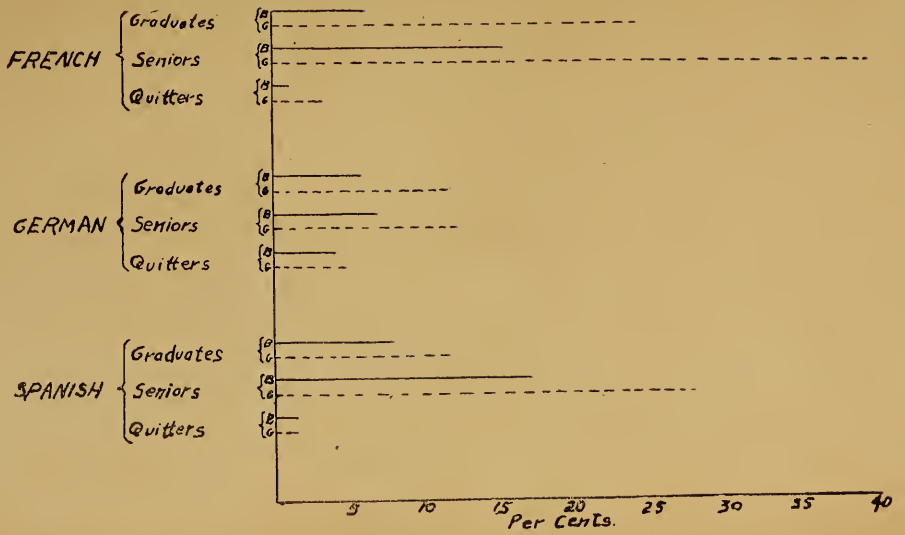
GRAPH IX (Continued)

Graphic comporison of per cents of three groups of pupils wanting various subjects added to the High School Course of Study.



GRAPH IX (Continued)

Graphic comparison of per cents of three groups of pupils wanting various subjects added to the High School Course of Study.



After studying tables XLI-XLIII together with the graphs, one is impressed with the fact that the desires of the students cover alomst every subject found in the high school or college curriculum. It is an evident fact that in many instances the pupils have no definite purpose in mind in naming these subjects which they want added to their high school course of study.

It is plainly evident from the nature of the subjects that the boys want added that the majority of them think in terms of practical subjects; while the girls, as a rule, tend more to the aesthetic or cultural side of an education. This is quite true in the world at large since the boys have to think of making a living and building a career, while the girls, as a rule, have never had to think along these lines.

We can say, too, that the two groups, graduates and quitters, which have left the high school desire subjects added that are of a far more practical and utiltarian nature than those of the seniors who are still in high school. This is especially true in the case of the graduate and quitter boys who have been out and have seen the need of agricultural and commercial training in the work they are doing. The same thing is true, in a sense, of the quitter girls. The two subjects they wish added most are domestic science and commerce. We can see the reason for this when we recall that practically 71 per cent* of them are at home and 2.6 per cent are clerking.

The fact that French, commerce, manual training, Spanish, physical education, expression, military training, German, and music are the nine leading subjects that the seniors wish added to their high school course proves the statement made previously in this study that the seniors think of a high school education as a preparation for college entrance, for the professions, or for a life of cultured ease, rather than a preparation for participation in the vocational activities of the communities in which they live.

A study of the subjects which the graduates wish added will show that this idea gradually changes as the pupils go from the school room into their life vocations. It is interesting to note,

*This figure is arrived at by combining the groups "at home" and "blank."

also, that the quitters scarcely mention French, art, music, and subjects of such nature.

If we let the graduates, the group that has gone through high school and from there (the majority of them) on into their life-work, and the quitters, the group that, for some reason, did not stay in high school to finish, be the determining elements in deciding what subjects should be added to the high school program of studies, when looked at from the pupil's point of view, we would be forced to recognize the demand for commerce, manual training, modern languages, teacher-training, agriculture, domestic science and chemistry.

If the above statement is true, the next question that arises is: Are subjects which the pupils want added of such a nature that the high school could well afford to offer them? The fact that the leading high schools all over the country are offering them renders a discussion of the topic unnecessary. Finally, if the pupils demand them, and the high schools can offer them, would the probable vocations of the pupils justify them on the basis of the "greatest good to the greatest number?" The best way to settle this proposition is to recall the fact stated on page 74; namely, that the majority of these girls who attend these high schools will remain in the homes and that the great majority of those who do not will enter one of the three groups of teaching, commercial work, or nursing; that about 5 per cent of the boys will enter the professions; that farming will be the chief occupation of the other 95 per cent and that farming will be followed closely by the occupations of manufacture and trade, clerking, teaching, the work of the artisan, and the work having to do with transportation. Comparing these probable vocations with the list of subjects named above, which all three groups suggested for addition to their high school program of studies, one is compelled to grant the wisdom of their demands if one accepts the modern viewpoint and recognizes that the true function of the modern high school is to train the great group which goes directly from the high school into commercial, industrial, and agricultural pursuits as well as to prepare the few for college entrance.

This discussion throughout has been confined to conditions

which are state-wide, and consequently, general in nature. The endeavor has been to ascertain the big central tendencies and conditions for the state as a whole. A detailed study of one typical school here, however, will help to make clearer and stronger the points made in general. The school selected for this purpose is the ———— County High School, located in the town of ————, the county seat, a small town of about fifteen hundred people, situated in the heart of the farming section of Middle Tennessee and patronized by pupils from both the town and the surrounding country. It is, therefore, what might be called a typical rural county high school. The majority of the pupils live out of town, many of whom come and go each day on bicycles, motorcycles, horses, in buggies, trains, interurbans, etc. In fact, nearly every type of conveyance used for travel, common to a rural community, is to be found around the school building during the day. One-hundred and fifty-one pupils are enrolled in this high school and seven teachers are employed to carry on the various lines of work offered. The following tables set forth the chief features of this school which the writer wishes to bring to the attention of the reader.

TABLE XLIV

OCCUPATION OF THE FATHERS OF THE PUPILS WHO ATTENDED THE ———— COUNTY HIGH SCHOOL.*

Occupations	Per cent
Blank	1.29
Professional	2.58
Semi-professional	3.23
Federal and Town Employee	4.52
Artisans	10.32
Transportation	1.29
Clerical Assistants	1.29
Personal Service	1.29
Middlemen (Ins. agents, etc.)	1.29
Manufacture and Trade	12.26
Farmer	54.18
Unclassified	6.46

*Taken from data in the Principal's office of the ———— County High School.

TABLE XLV

OCCUPATIONS OF THE OLDER BROTHERS AND SISTERS WHO ATTENDED THE ———— COUNTY HIGH SCHOOL.*

Occupations	Boys %	Girls %	Total %
Professional	0	6.0	2.7
Semi-professional	5.0	0	2.7
Federal or City Employee	10.0	0	5.4
Artisans	5.0	0	2.7
Transportation	10.0	0	5.4
Clerical Assistants	20.0	0	10.8
Middlemen (office workers)	5.0	0	2.7
Manufacture and Trade	5.0	0	2.7
In School	5.0	30.0	16.2
At Home	5.0	64.0	32.5
Farmer	30.0	0	16.2

*Data tabulated from the records in the Principal's office of the ———— County High School.

TABLE XLVI

DISTANCE TRAVELED BY THE PUPILS WHO ATTENDED THE ———— COUNTY HIGH SCHOOL.*

Distance traveled	Per cent
Live in town	41.7
R. F. D. 1 to 12 miles	31.7
†Six miles	1.3
Eight miles	4.6
Ten miles	2.6
Eleven miles	2.6
Twelve miles	.7
Fifteen miles	9.9
Twenty miles	.7
Boarding in town	.7
Not given	3.3

*Data tabulated from the records in the Principal's office of the ———— County High School.

†The pupils living six, eight, ten, eleven, twelve, fifteen and twenty miles from school go in on the trolley, for the most part.

TABLE XLVII

CHOSEN OCCUPATIONS OF THE PUPILS WHO ATTENDED THE ———— COUNTY HIGH SCHOOL.*

Occupations	Boys %	Girls %	Total %
Blank	0	15.6	11.61
Professional	26.0	4.8	9.83
Semi-professional	4.0	2.4	2.67
Artisans	12.0	0	2.67
Transportation	4.0	0	.89
Clerical Assistants	4.0	10.8	8.93
Manufacture and Trade	8.0	0	1.78
Teach	12.0	63.8	51.78
At Home	0	2.4	1.79
Farmer	32.0	0	7.14

*Data tabulated from questionnaires filled by all the pupils of this school.

TABLE XLVIII

PER CENT OF RECITATIONS IN THE ———— COUNTY HIGH SCHOOL DEVOTED TO THE VARIOUS SUBJECTS.*

Subjects taught	Per cent of total recitations devoted to this subject
Foreign Languages	24.98
Latin	43.1
German	28.7
Spanish	25.2
French	3.0
English	21.80
Mathematics	21.28
Algebra	35.9
Geometry	64.1
History	15.92
Medieval and Modern	36.4
Ancient	33.6
American	18.7
English	11.3
Home Economics	7.02
Agriculture	6.28
Chemistry	2.72

Note.—This table means that 24.98 per cent of all the recitations were in foreign languages while 43.1 per cent of these were in Latin, 28.7 per cent in German, etc.

*Data tabulated from the records of the Principal's office of the ———— County High School.

The occupations of the fathers and older brothers and sisters of this school are practically the same as those found for the state as a whole. The anticipated occupations of the pupils are also very similar to those planned by the three groups studied representing all sections of the state. These facts show that this County High School is strictly a rural high school, patronized mainly by rural people.

Of the total enrolment of the pupils 41.7 per cent live in ————, 31.7 per cent live outside the town on the rural routes within a radius of twelve miles, and 26.6 per cent live in or near small towns six to twenty-six miles from ————, and come in daily on the interurban. This school is situated in an agricultural community. Every patron of the school is either directly or indirectly interested in agricultural pursuits. Over 54 per cent of them are actively engaged in such occupations. The interests and problems common to rural life are really the vital problems in the homes of all these pupils. This being true, it follows that the predominating activities of the school should grow out of the rural life problems of these people and should serve to promote the best interests and general welfare of the community.

Instead of this high school's realizing its opportunity of rendering real service in this community, and consequently, organizing and directing its course of study to that end, it seems perfectly satisfied to go along in the old traditional way, with the rest of the high schools of the state, perfectly oblivious of its opportunity for service. Table XLVIII, which shows what its course of study is, and what percentage of all the recitations is given to each subject, proves that it is making practically no effort to adapt its work to the real needs of the community which it serves.

Despite the fact that the vocations and interests of the parents and older members of the families who patronize this school are predominately agricultural, only 6.28 per cent of all the recitations are in agriculture. The agricultural work that is offered is of the most bookish kind with practically no laboratory equipment—a type of instruction that would tend to repel rather than draw students. Not only is the equipment very meager

but the teacher of agriculture and chemistry is the most poorly paid of any other member of the faculty.

Although over 60 per cent of the pupils are girls the majority of whom will eventually be the home-makers or the teachers in that rural community, only 7.02 per cent of all the recitations are in home economics. Regardless of the fact that the natural sciences are at the base of all the vocational activities of the great majority of these people, chemistry is the only science offered in the school and that only in the senior year, making a total of 2.72 per cent of the recitations devoted to a study of the natural sciences.

There are four times as many pupils studying foreign languages as there are studying home economics. Another way of estimating the value put upon the course of study is to note that one-fourth of all the recitations are in some foreign language; that nearly one-half (46.26 per cent) of all the recitations are in foreign languages and mathematics; that practically one-half (46.78 per cent) of all the recitations are in languages; that over one-half (51.56 per cent) of all the recitations are in foreign languages, algebra, geometry and ancient history, and finally that practically two-thirds (62.18 per cent) of all the recitations are in foreign languages, mathematics, and history.† This con-

†To show in still another way that this is a typical rural county high school of the state, a table is presented below showing the per cent of the students in these schools coming directly from the open country:

TABLE XLIX

NUMBER OF PUPILS ENROLLED FROM CITY OR TOWN AND FROM COUNTRY IN COUNTY HIGH SCHOOLS OF TENNESSEE.

	City or Town		County	
	No.	% Increase	No.	% Increase
1909-10	1968		1979	
1910-11	2333	18.5	3474	75.5
1911-12	2534	28.8	3850	94.5
1912-13	3353	70.4	4534	129.1
1913-14	3013	53.1	4447	124.7
1914-15	3860	96.1	6040	205.2
1915-16	4003	103.4	6488	227.9

Note.—Above table was secured from data taken from the biennial reports of the State Superintendent of Public Instruction of Tennessee.

dition substantiates the statement made several times in this study that the majority of the time of the pupils is taken up with the formal studies. How could a school, thus bound by tradition be able to serve its community to any appreciable extent! Evidently the authorities in this instance feel that "Without the shedding of foreign language there is no remission of ignorance." They appear to feel quite sure that "There are in a few classical subjects a sacramental virtue which makes them an indispensable means of intellectual salvation."*

We have found in this school that the occupations of the fathers and the older brothers and sisters are practically the same as those for all of the schools of the state as a group; that the occupations the pupils of this school plan to enter are about the same as those of the schools of the state as a group; that as regards the course of study, the majority of the time of the pupils of this school, as well as that of all the pupils of these schools as a group, is spent in the formal subjects of English, mathematics, foreign languages, and history; and that the practical and utilitarian subjects receive but little stress and attention. This shows conclusively that the ———————— County High School is a representative type of the first-class county high school of Tennessee; that what has been said of its population, course of study, etc., will apply equally well to all the first-class county high schools of the state as a group; and what may be said of the reorganization of its course of study will apply equally well also to the state situation. The chapter on conclusions and recommendations contains suggestions as to needed reorganization.

*Lewis, Democracy's High School.

CHAPTER IX

CAUSES OF ELIMINATION IN TENNESSEE COUNTY HIGH SCHOOLS

Up to this point the writer has showed the kind of community these first-class county high schools are serving; the vocational opportunities open to the students of these schools; the vocations they will likely enter; the type of training they have had as a preparation for their chosen work; and what further training they will need. He has also pointed out that only 11 pupils out of every 100 who enter the elementary school finish high school; and that something is woefully wrong when such a large group enters high school to dwindle down to so few who remain to graduate. In the present chapter he undertakes to show that the kind of work offered is of such a nature that it fails to grip the pupils, the result of which is heavy elimination. In discovering why the pupils of the first-class county high schools of Tennessee leave before graduation, again he approaches the problem from the viewpoint of the pupils themselves. In order to get as thorough a grasp of the situation as possible he compares the reasons that the principals gave for the pupils' leaving, with the reasons the pupils themselves gave. To get the data for this phase of the study, the principals of these sixty first-class county high schools were asked to state why these pupils left high school before graduation; then the pupils themselves were asked the same question and the two groups of answers correlated.

The results obtained are of sufficient import in the mind of the writer to justify the method of approach, and it is to be hoped that those who are interested enough to study the problem may be convinced also of its effectiveness. For reasons too numerous and obvious to mention, the writer has thought it best to retain the exact expressions of the pupils and principals in compiling tables. For convenience in discussing and comparing the work the answers are thrown into large groups.

Table L which follows contains the reasons given by the principals of these high schools as to why these 972 pupils left high school before graduation.

TABLE L

PRINCIPALS' REASONS WHY QUITTERS LEFT HIGH SCHOOL BEFORE GRADUATION.*

Boys.....588
Girls.....384

Total 972

	Boys		Girls		Total	
	No.	%	No.	%	No.	%
Blank	111	18.9	70	18.2	181	18.6
To stay at home						
Family troubles	0	0	2	.5	2	.2
Father would not send me	6	1.0	2	.5	8	.8
Married	12	2.0	49	12.7	61	6.3
To keep house	0	0	5	1.3	5	.5
	18	3.0	58	15.0	76	7.8
To clerk	3	.6	0	0	3	.3
To work						
To work	41	7.0	9	2.3	50	5.1
Wanted to work	20	3.5	2	.5	22	2.3
	61	10.5	11	2.8	72	7.4
To teach						
To teach	14	2.4	22	5.7	36	3.7
To farm						
To farm	17	2.9	0	0	17	1.8
Distance from school						
Too far, and roads too bad	10	1.7	10	2.6	20	2.1
Moved away						
Moved away	23	3.9	36	7.4	59	6.1
To go to other schools						
Changed schools	3	.5	3	.8	6	.6
To enter						
Business college	6	1.0	1	.3	7	.7
College	6	1.0	2	.5	8	.8
Preparatory	7	1.2	11	2.9	18	1.9
University	3	.5	0	0	3	.3
	25	4.3	17	4.4	42	4.3
Financial reasons						
Financial reasons	23	3.9	13	3.4	36	3.7
Had to work	29	4.9	5	1.3	34	3.5
Needed at home	0	0	3	.8	3	.3
	52	8.8	21	5.5	73	7.5

*The data for this table were derived from the blanks filled by the Principals of these 60 first-class County High Schools.

TABLE L (Continued)

	Boys		Girls		Total	
	No.	%	No.	%	No.	%
Illness of parents						
Death of parents	5	.8	4	1.0	9	.9
Sickness in home	4	.7	10	2.6	14	1.4
	9	1.5	14	3.6	23	2.3
On account of the teachers						
Dislike for the teachers	1	.2	0	0	1	.1
Disliked a grade received on one examination	1	.2	0	0	1	.1
Mother did not want him punished	1	.2	0	0	1	.1
Suspended	16	2.7	1	.3	17	1.8
Trouble with teachers	0	0	1	.3	1	.1
	19	3.2	2	.6	21	2.2
Lack of interest, etc.						
Behind in work	1	.2	1	.3	2	.2
Because his brother did	1	.2	0	0	1	.1
Changed to get the boys out of her head	0	0	1	.3	1	.1
Constitutional dislike for school	1	.2	0	0	1	.1
Could not graduate	1	.2	1	.3	2	.2
Did not care for books	1	.2	0	0	1	.1
Discouraged	6	1.0	4	1.0	10	1.0
Disliked school work	9	1.5	2	.5	11	1.1
Failed	24	4.1	10	2.6	34	3.5
Football season ended	1	.2	0	0	1	.1
Had enough	1	.2	0	0	1	.1
Indifference	15	2.6	6	1.6	21	2.2
Knew enough	0	0	1	.3	1	.1
Lack of interest	63	10.7	35	9.1	98	10.1
Laziness	3	.5	1	.3	4	.4
No ambition	9	1.5	3	.8	12	1.2
No athletics offered	1	.2	0	0	1	.1
No brains	2	.3	0	0	2	.2
Older than classmates	2	.3	0	0	2	.2
Poor student	12	2.0	6	1.6	18	1.9
Poor preparation in the lower grades	12	2.0	12	3.1	24	2.5
Preferred society	0	0	2	.5	2	.2
Pure "cussedness"	1	.2	0	0	1	.1
Ran away from home	2	.3	0	0	2	.2
Shiftlessness	2	.3	1	.3	3	.3
Tired of coming	5	.8	1	.3	6	.6
To fish and hunt rabbits	1	.2	0	0	1	.1
Too rich to go to the public schools	1	.2	1	.3	2	.2
Wanted independence	1	.2	0	0	1	.1
Will-of-the-wisp-sort of fellow	1	.2	0	0	1	.1
Would not study	3	.5	1	.3	4	.4
	182	30.9	89	23.1	271	27.9

TABLE L (Continued)

	Boys		Girls		Total	
	No.	%	No.	%	No.	%
Illness of pupils						
Bad eyes	3	.5	0	0	3	.3
Got behind from sickness	0	0	1	.3	1	.1
Impediment of speech	1	.2	2	.5	3	.3
Poor health	21	3.6	20	5.2	41	4.2
Scared of smallpox	1	.2	0	0	1	.1
	26	4.4	23	6.0	49	5.0
On account of curriculum						
Course not suited to needs	1	.2	0	0	1	.1
Dislike for mathematics	0	0	1	.3	1	.1
Failed in mathematics	1	.2	0	0	1	.1
Interested in art, not literary work	0	0	1	.3	1	.1
Interested in domestic science, not in literary work	0	0	1	.3	1	.1
To specialize in music	0	0	3	.8	3	.3
Wanted to take manual training which conflicted with algebra, and I made him take algebra	1	.2	0	0	1	.1
	3	.5	6	1.6	9	.9
Unclassified						
Eager to enter business	11	1.8	1	.3	12	1.3
To become a missionary	0	0	1	.3	1	.1
To become a trained nurse	0	0	3	.8	3	.3
To preach	2	.3	0	0	2	.2
To learn a trade	1	.2	0	0	1	.1
To sell books	1	.2	0	0	1	.1
	15	2.5	5	1.4	20	2.1

From the above table which contains the reasons why the principals say that the pupils left high school before graduation, we see that there is no one all-important reason in the minds of the principals as to why they think pupils fail to stay in school until graduation. The groups "To stay at home," "To work," "Moved away," "Financial reasons," "Illness of pupils," and "To go to other schools" are all of about equal importance.

It is a significant fact also that the principals are unable (or unwilling) in 18.6 per cent of the cases to say why the pupils left before graduation. If they really do not know why they left, this lack of sympathy and mutual understanding between pupils and teacher probably helps to account for the heavy elimination.

Another significant thing about this table is the fact that the principals do not lay the blame of elimination at the door of either the teachers (2.2 per cent) or the course of study (.9 per cent).

The largest single group of reasons given is the one entitled "Lack of interest." Close to 28 per cent of all those who left did so, in the opinion of the principals, from a lack of interest, or some such kindred reason. The very fact that the principals recognize that nearly one-third of all those who leave school before graduation do so because they have lost all interest in the school is a serious indictment of the schools as a group. Since this is true, something must be radically wrong either with the course of study, the teaching force, or the organization and equipment of the school. Of course, there are causes of elimination such as sickness, lack of finances, etc., over which the schools have no power, but when nearly one-third of all those who leave do so from a "lack of interest" then the challenge is one which should grip every eager, earnest educator.

The seriousness of this situation is further illustrated by the fact that the principals are unable to say just why 18.6 per cent of all those who left did so. If we put this group with the "lost interest" group they will compose nearly one half (46.5 per cent) of the entire group studied. In thinking this situation over one can not help bringing a charge of gross inefficiency against the entire high school system of the state, and wonder at the complacency of the principals when they attribute only a small per cent (3.1 per cent) of the trouble to the inefficiency of the teachers or of course of study. If the principals feel that they have satisfactory equipment, capable teachers, and well adapted courses of study, then how do they account for the fact that only a few out of every one hundred freshmen ever remain to become seniors? Especially since they admit that only about 17 per cent of those who leave are forced to quit on account of poor health, lack of finances, distance from school, and like reasons over which the pupils have no control?

Taking these reasons offered by the principals as a whole they seem to express in a general way the common opinions held by educators today as to why pupils leave high school before graduation.

Let us turn now to the pupil's point of view and see if we can learn anything from them that would throw light on the problem of elimination. Let us see if their reasons for leaving high school are similar to those given by the principals.

In table LI which follows we do not have answers from all the pupils whose names the principals gave, but the 440 responses that we do have are representative of the group, and for all comparative purposes are satisfactory.

TABLE LI

QUITTERS' REASONS FOR LEAVING HIGH SCHOOL BEFORE GRADUATION.*

Boys.....285
Girls.....155

Total.....440

	Boys		Girls		Total	
	No.	%	No.	%	No.	%
Blank	13	4.5	5	3.2	18	4.1
To stay at home						
To help mother make a living	1	.4	0	0	1	.2
To keep house for father	0	0	1	.7	1	.2
Trouble at home	0	0	1	.7	1	.2
To marry	4	1.4	7	4.5	11	2.5
	5	1.8	9	5.9	14	3.1
To clerk	2	.7	0	0	2	.5
To work						
Rather work	4	1.4	0	0	4	.8
To benefit myself in better work	1	.4	0	0	1	.2
To prepare for work earlier	1	.4	0	0	1	.2
	6	2.3	0	0	6	1.4
To teach						
Quit to teach	4	1.4	4	2.6	8	1.8
Quit to teach and then go back	1	.4	0	0	1	.2
Taught for one year for a change	0	0	1	.7	1	.2
To review for county school examination	0	0	2	1.3	2	.5
	5	1.8	7	4.6	12	2.7

*The data for this table were derived from the questionnaires filled by the quitters.

TABLE LI (Continued)

	Boys		Girls		Total	
	No.	%	No.	%	No.	%
To farm						
Had to go to work on the farm	3	1.1	0	0	3	.7
Had to help my parents on the farm	3	1.1	0	0	3	.7
Quit to make a crop	1	.4	0	0	1	.2
Rather farm	4	1.4	0	0	4	.9
To dairy and farm	1	.4	0	0	1	.2
To take charge of a farm	2	.7	0	0	2	.5
To work on a farm	5	1.8	0	0	5	1.1
	19	6.9	0	0	19	4.3
Distance from school, etc.						
Bad roads	1	.4	1	.7	2	.5
Inconvenience of location	0	0	3	1.9	3	.7
Lived too far from school	10	3.6	6	3.9	16	3.7
Moved out to the farm too far from school	1	.4	1	.7	2	.5
No transportation	2	.7	1	.7	3	.7
	14	5.2	12	7.9	26	6.1
Moved away						
Moved away	2	.7	0	0	2	.4
Moved away and I would not go to the new school	0	0	1	.7	1	.2
To travel	1	.4	0	0	1	.2
Went west	1	.4	0	0	1	.2
	4	1.4	1	.7	5	1.0
To go to other schools						
To enter						
Another school	6	2.2	14	9.1	20	4.5
Business college	3	1.1	0	0	3	.7
College	1	.4	2	1.3	3	.7
Private school	7	2.5	11	7.2	18	4.1
State normal	1	.4	5	3.2	6	1.4
Had chance to go to college; do you blame me?	0	0	1	.7	1	.2
To take business course to prepare to support family	1	.4	0	0	1	.2
To study pharmacy	1	.4	0	0	1	.2
To specialize in music	0	0	3	1.9	3	.7
	20	7.4	36	23.6	56	12.7
Financial reasons						
Anxious to make my own living	2	.7	0	0	2	.5
Had to work	11	3.8	3	1.9	14	3.2
Lack of finances	50	17.5	3	1.9	53	12.2
Too old and had to work	4	1.4	0	0	4	.9
	67	23.4	6	3.9	73	16.8

TABLE LI (Continued)

	Boys		Girls		Total	
	No.	%	No.	%	No.	%
Illness of parents						
Death of parents	8	2.8	4	2.6	12	2.8
Sickness in the home	11	3.8	16	10.4	27	6.3
Step-mother became insane	0	0	1	.7	1	.2
	19	6.6	21	13.7	40	9.3
Illness of pupils						
Epilepsy	1	.4	0	0	1	.2
On account of eyes	5	1.8	8	5.2	13	3.0
Sickness	22	7.7	28	18.2	50	11.5
	28	9.9	36	23.4	64	14.7
On account of the teachers						
Didn't like the teachers	3	1.1	0	0	3	.7
Didn't like the teachers and some of the studies	1	.4	1	.7	2	.5
Inefficient teachers and courses	0	0	1	.7	1	.2
Lack of interest on part of teachers	1	.4	0	0	1	.2
On account of distinction cards	2	.7	0	0	2	.5
Partiality of teachers	1	.4	0	0	1	.2
Principal took his text on me at the chapel exercises one day	0	0	1	.7	1	.2
Rules were so hard	1	.4	0	0	1	.2
Teacher had too many pets and tried to run over me	1	.4	0	0	1	.2
Teachers not interesting and friends all quit high school	1	.4	0	0	1	.2
Teachers too slack in their work	1	.4	0	0	1	.2
Teacher would not give me the examination at the close of school	1	.4	0	0	1	.2
Trouble with principal	2	.7	1	.7	3	.7
Trouble with teacher	4	1.4	0	0	4	.9
	19	7.1	4	2.8	23	5.1
On account of curriculum						
Because I would not study Latin	1	.4	0	0	1	.2
Couldn't get the studies I wanted	1	.4	0	0	1	.2
Couldn't get the studies I needed	1	.4	0	0	1	.2
Couldn't keep up with my classmates	1	.4	0	0	1	.2
Could get no credit for my work done in chemistry	1	.4	0	0	1	.2
Didn't like some of my studies	1	.4	0	0	1	.2
Discouraged with my grades	0	0	1	.7	1	.2
Failed in geometry	1	.4	1	.7	2	.5
Failed in my studies	1	.4	0	0	1	.2
Failed to pass and got discouraged	1	.4	0	0	1	.2
Finished all the four years' work but the foreign languages and didn't like them	1	.4	0	0	1	.2

TABLE LI (Continued)

	Boys		Girls		Total	
	No.	%	No.	%	No.	%
Finished up all the four years' work but mathematics	1	.4	1	.7	2	.5
Found languages too hard for me	1	.4	0	0	1	.2
Have not quit for good, the agricultural course has closed	1	.4	0	0	1	.2
I couldn't understand algebra	0	0	1	.7	1	.2
I found that my school work was not practical for business life	1	.4	0	0	1	.2
Overtaxed with studies	0	0	1	.7	1	.2
Studies were of no benefit to me	1	.4	0	0	1	.2
They did not teach the course I wanted	1	.4	0	0	1	.2
Wanted to take domestic science and prepare to teach and they wouldn't let me	0	0	1	.7	1	.2
	16	6.4	6	4.4	22	2.2
Lack of interest, etc.						
Couldn't go regularly	0	0	1	.7	1	.2
Didn't like there	1	.4	1	.7	2	.5
Dissatisfied	1	.4	3	1.9	4	.9
Doing no good	2	.7	0	0	2	.5
Doing no good and had chance to work	1	.4	0	0	1	.2
General principles	1	.4	0	0	1	.2
Got behind	1	.4	0	0	1	.2
Got out of heart and could not learn	1	.4	0	0	1	.2
Got tired of poor building	0	0	1	.7	1	.2
Got tired and at the time did not think it was worth while	1	.4	0	0	1	.2
Got too large and lost interest	1	.4	0	0	1	.2
Had been so much I was tired and worn out	0	0	1	.7	1	.2
I did not have the sense or energy to study	1	.4	0	0	1	.2
I was not learning anything	1	.4	0	0	1	.2
Lacked means and determination	1	.4	0	0	1	.2
Lost interest	1	.4	1	.7	2	.5
No good reason	0	0	1	.7	1	.2
Not learning anything	7	2.4	0	0	7	1.6
Tired of going	3	1.1	1	.7	4	.9
Too long a term	1	.4	0	0	1	.2
Too trifling to go	1	.4	0	0	1	.2
We were allowed too many privileges to make good in school	0	0	1	.7	1	.2
	26	9.8	11	7.5	37	8.1

TABLE LI (Continued)

	Boys		Girls		Total	
	No.	%	No.	%	No.	%
To learn a trade						
To learn the trade of a—						
Blacksmith	1	.4	0	0	1	.2
Shoemaker	1	.4	0	0	1	.2
Bricklayer	1	.4	0	0	1	.2
Business man	1	.4	0	0	1	.2
Druggist	1	.4	0	0	1	.2
Lumberman	1	.4	0	0	1	.2
Merchant	3	1.1	0	0	3	.7
Printer	2	.7	0	0	2	.5
Soda dispenser	1	.4	0	0	1	.2
Laundryman	1	.4	0	0	1	.2
Banker	1	.4	0	0	1	.2
Grocerman	1	.4	0	0	1	.2
	15	4.9	0	0	15	3.1
Unclassified						
Did not want to be a teacher	1	.4	0	0	1	.2
Just out for this year	2	.7	0	0	2	.5
To be R. F. D. carrier	1	.4	0	0	1	.2
To work in postoffice	1	.4	0	0	1	.2
Was appointed special agent of the Census Bureau	1	.4	0	0	1	.2
Out temporarily	1	.4	1	.7	2	.5
	7	2.7	1	.7	8	1.8

In reading the reasons the pupils give for leaving high school before graduation, as they are stated in the above table, one is struck by the fact that nearly one-half of all the reasons the pupils give are of a nature over which the high school has no control,—illness 24 per cent; lack of finances 16.8 per cent; moved away 1 per cent; and distance from school 6.1 per cent. However, the other half quit school from choice rather than necessity. Evidently these boys and girls do not think of a high school education as a necessary preparation to "teach school," "to farm," "to clerk," or "to learn a trade." For some reason the high school has not made itself felt in the lives of these pupils who have left and gone to work so poorly prepared.

The fact that one out of every eight who leave high school does so in order to go to some other school for special work which the high school is not offering, should furnish food for thought for those who are responsible for the Tennessee high

school course of study. It does not look fair for the pupils to have to leave high school and go to another school and pay tuition and board for work if it can be offered in their high school. Excerpts from a few of the many letters received regarding this phase of the high school work will set forth in a vivid way some of the reasons why pupils leave high school to go to some private school.

> "I left high school to finish the academic course at the State Normal, since I knew I would be better prepared to teach."
>
> "It takes four years to complete high school and in one or two years, one can complete a commercial course in a business college and be at work with two years saved. I mean the middle class. Of course the rich can go to school all their lives, but we poor farmer boys have to get out as quickly as we can."
>
> "I quit because there was no art teacher there and I wanted to continue my art lessons with my literary course, so I quit and entered this private school to continue my course where I have a splendid teacher."
>
> "There was no music teacher there so I came where I could take voice along with my other work."
>
> "I quit to go to a private military institute so I could take military training too."
>
> "I quit the public high school and went to a private school because I could then have more attention from teachers, and also had better teachers. And again I could be with a better class of people.

In order to understand more fully the pupils' point of view let us next consider in this connection table LII, which has to do with the conditions under which the quitters say that they would return to high school, and table LIII, which approaches the problem of why pupils quit high school from many points of view since it is compiled from the answers of the seniors, the graduates, and the quitters concerning their older brothers and sisters who at one time attended high school but left before graduating. Let us turn now to the table showing the conditions under which the quitters say they would return to high school.

TABLE LII

CONDITIONS UNDER WHICH QUITTERS WOULD GO BACK TO HIGH SCHOOL.*

Boys.....285
Girls.....155

Total.....440

	Boys		Girls		Total	
	No.	%	No.	%	No.	%
Blank	66	23.1	56	36.4	122	28.1
Better health in family						
If mother had better health	0	0	4	2.6	4	.9
Better health of pupils						
Better health	6	2.1	8	5.2	14	3.2
If I could climb the steps	0	0	1	.7	1	.2
If I did not have to be confined too closely to the schoolroom	1	.4	0	0	1	.2
Stronger eyes	2	.7	4	2.6	6	1.4
	9	3.2	17	11.1	26	6.0
Shorter distance, better roads, etc.						
Better conveyance to school	2	.7	0	0	2	.5
Better roads	1	.4	0	0	1	.2
Have free transportation	1	.4	1	.7	2	.5
Have school in the county	2	.7	0	0	2	.5
Live closer to school	9	3.2	5	3.2	14	3.2
	15	5.5	6	3.9	21	4.8
Better financial conditions						
Financial	77	27.0	32	20.8	109	25.1
If I could make my own living while going to high school	10	3.5	5	3.2	15	3.5
	87	30.5	37	24.0	124	28.6
Better school activities						
Have a band in school	1	.4	0	0	1	.2
Have better athletic opportunities	2	.7	0	0	2	.5
Have a gymnasium and an athletic coach	1	.4	0	0	1	.2
Have opportunity to try for basketball team	1	.4	0	0	1	.2
Have opportunity to try for baseball team	1	.4	0	0	1	.2
	6	2.3	0	0	6	1.3
Change of schools						
By going somewhere else to school	0	0	3	1.9	3	.7
Have good opportunity in some other good school	1	.4	0	0	1	.2
If there were no better schools	1	.4	0	0	1	.2
Prefer boarding school	0	0	1	.7	1	.2
Prefer going to a preparatory school	3	1.1	3	1.9	6	1.4
	5	1.8	7	4.6	12	1.7

*The data for this table were secured from the questionnaires filled by the quitters.

TABLE LII (Continued)

	Boys		Girls		Total	
	No.	%	No.	%	No.	%
Change of teachers						
Better principal	1	.4	0	0	1	.2
Get old teachers back	0	0	1	.7	1	.2
Get teachers that are all married	1	.4	0	0	1	.2
Give us a principal that we could get along with	1	.4	0	0	1	.2
Given a pass on geometry and had all new teachers	1	.4	0	0	1	.2
Have a faculty with the bloom of youth with fewer years	1	.4	0	0	1	.2
Have better teachers	4	1.4	0	0	4	.9
Have teachers that would see that every pupil brought up his work or know the reason why	1	.4	0	0	1	.2
If teachers would do me fair about my grades	1	.4	0	0	1	.2
	11	4.2	1	.7	12	2.5
Change of curriculum						
Have engineering courses	1	.4	0	0	1	.2
Have higher commercial course	1	.4	0	0	1	.2
If I could begin the study of law or some other profession	1	.4	0	0	1	.2
If I could get a diploma without studying languages	1	.4	0	0	1	.2
If I could get higher work in history and English	1	.4	0	0	1	.2
If I did not have to take foreign languages	1	.4	0	0	1	.2
If I did not have to take Latin and algebra	0	0	1	.7	1	.2
If they taught agriculture	5	1.8	0	0	5	1.1
If there was a commercial course	5	1.8	2	1.3	7	1.6
Let us pick our own subjects	1	.4	0	0	1	.2
None, unless I wanted to prepare for teaching	1	.4	0	0	1	.2
Only take the subjects I want to	3	1.1	1	.7	4	.9
Study medicine	1	.4	0	0	1	.2
Study music	0	0	2	1.3	2	.5
Study things practical to business life	1	.4	0	0	1	.2
That they take my notes on chemistry	1	.4	0	0	1	.2
Under conditions that might help me learn railroad transportation better	1	0	0	0	1	.2
When the polytechnic high school starts new and special courses	1	.4	0	0	1	.2
	26	9.1	6	4.0	32	7.4

TABLE LII (Continued)

	Boys		Girls		Total	
	No.	%	No.	%	No.	%
Change of administrative plans						
Have better buildings	1	.4	0	0	1	.2
If grading system was the same as that at the University of Tennessee	1	.4	0	0	1	.2
If I could go into the eleventh grade	1	.4	0	0	1	.2
If I could graduate	5	1.8	1	.7	6	1.4
If the high school was as well equipped as a preparatory school is	0	0	1	.7	1	.2
Lighter rules	1	.4	0	0	1	.2
Not be forced into literary societies	1	.4	0	0	1	.2
Only have four hours a day	1	.4	0	0	1	.2
Only take as many studies as I could do nicely	0	0	1	.7	1	.2
Principal give us the examinations	1	.4	0	0	1	.2
Stricter discipline	1	.4	0	0	1	.2
Stricter rules in schoolroom	0	0	1	.7	1	.2
That those who do not have money would be the same as others who do	1	.4	0	0	1	.2
	14	5.3	4	2.8	18	4.1
Under no conditions	26	9.1	3	1.9	29	6.6
Unclassified						
Better social conditions	0	0	1	.7	1	.2
Go regularly	1	.4	0	0	1	.2
If all the other boys of my age went back	1	.4	0	0	1	.2
If I could get in the habit of studying again	1	.4	0	0	1	.2
If I could get my mind on school	1	.4	1	.7	2	.5
If my parents would let me come	2	.7	1	.7	3	.7
If the school had better moral conditions	0	0	1	.7	1	.2
Married and can't	1	.4	1	.7	2	.5
None—am going abroad	1	.4	0	0	1	.2
Only in case that mamma and papa made me	0	0	1	.7	1	.2
Too far behind now in my studies	0	0	1	.7	1	.2
Too old to go now	3	1.1	2	1.3	5	1.2
Will go back	9	3.2	9	5.8	18	4.1
	20	7.0	18	11.3	38	8.1

TABLE LIII

A COMPARISON OF THE PRINCIPALS' WITH THE QUITTERS' REASONS AS TO WHY THEY LEFT HIGH SCHOOL BEFORE GRADUATION.*

	Principals (972)		Quitters (440)	
	No.	%	No.	%
Blank	181	18.6	18	4.1
To stay at home	76	7.8	14	3.1
To clerk	3	.3	2	.5
To work	72	7.4	6	1.4
To teach	36	3.7	12	2.7
To farm	17	1.8	19	4.3
Distance from school	20	2.1	26	6.1
Moved away	59	6.1	5	1.0
To go to other schools	42	4.3	56	12.7
Finances	73	7.5	73	16.8
Illness of parents	23	2.3	40	9.3
Illness of pupils	49	5.0	64	14.7
On account of teachers	21	2.2	23	5.1
On account of curriculum	9	.9	22	2.2
Lost interest, etc.	271	27.9	37	8.1
Learn a trade	0	0	15	3.1
Unclassified	20	2.1	8	1.8

*This table was derived from tables L-LI.

In table LII if we combine the 6.6 per cent who say that they would return to high school under no conditions with the 28.1 per cent who did not give any answer, we can pretty safely say that nearly 35 per cent of the quitters would not return to high school under any condition.

Illness, lack of finances, and distance from school are three of the most important factors which function in this problem. All of these combined, however, will not nearly offset the one big factor of indifference which will be discussed a little later. Bad roads, distance from school, and lack of finances argue strongly in favor of carrying the rural high school within reach of the students. A few excerpts from a number of individual letters received from the quitters will express this situation better than any comment. The letters follow:

> "The reason that the most of the country boys quit high school is because they are not started in time. Their fathers think that they should be 18 or 19 before they are old enough to attend school in town and board away from home.

By then the boy is ashamed to go in the classes with the small boys and girls who have always had a chance." (Boy.)

"I live too far out in the country to go from home. I would have to board if I went. I quit school in December which was my first year in high school." (Girl.)

"I quit because I walked at least four miles night and morning through the rain and snow the two years that I went. This year I thought that I would not expose myself that way." (Girl.)

"It was seven or eight miles to school and several other boys and girls quit for the same reason when I did." (Boy.)

However, leaving out of consideration for the time being these reasons over which the schools have little control, there is still a large group of quitters which give no valid reason for quitting.

The one striking thing which characterizes the whole matter, when we look at it from the pupils' point of view, is there alarming indifference to the whole affair. There could be no better evidence than this to reveal the small part that the high school plays in the lives of its pupils. If those who left felt on leaving that they were doing so because they had not got the things they needed as a preparation for their life work, then the replies to this question would have been of a definite nature demanding specific things. As it is, the indifference of some is so great that they refused to make any answer at all. What really happens, it seems, is that the pupils find themselves in high school with no definite reason as to why they came or what they are there for, and after a few months of supposed study of subjects which are as dry and meaningless to them as they are difficult of mastery, they find themselves saying; "What is the use of all this? What is the use of spending four years at this when one can get a job and go to making money?" The natural thing happens: the pupil leaves school unless pressure is brought to bear on him at home. In contemplating this condition, one is almost prone to regard our American schools as H. G. Wells regards the English schools when he says of them: "They are born of tradition and confused purposes, achieving by accident what they achieve at all."

So far we have been discussing the pupils' and the principals'

reasons for elimination separately. Let us now put them together and see what relationship exists between the two points of view. Grouping all the reasons given for leaving high school under two headings we have:

A. Those over which the school has no control	*B. Those over which the school has control*
Distance from school	To stay at home
Moved away	To clerk
Lack of finances	To work
Illness of parents	To teach
Illness of pupils	To farm
	To go to other schools
	To learn a trade
	On account of the teachers
	On account of the curriculum
	Unclassified.

In few instances do the pupils' and the principals' points of view agree. In group A above the principals place 23 per cent of the reasons while the pupils place there more than double that per cent (47.9). This means that the principals acknowledge that more than three-fourths (77 per cent) of those who leave high school before graduation do so from no necessity.

Again, we can compare the two points of view by ranking in the order of their importance the five most prominent reasons given by each group. The ranks are as follows:

Principals' reasons	*Pupils' reasons*
1. Lost interest	1. Lack of finances
2. To stay at home	2. Illness of pupils
3. To work	3. To go to other schools
4. Lack of finances	4. Illness of parents
5. Moved away	5. Lost interest.

In studying this comparison we are struck forcibly with the fact that there is a lack of mutual understanding between the pupils and the principals. What the principals consider as lack of interest in many cases proves to be a necessity in the minds of the pupils. Yet in many cases, no doubt, the slightest excuse at home is of sufficient import for the pupils to serve as a sub-

terfuge for quitting school. Their attitude toward school will usually determine the effectiveness of the barrier.

Whatever else we may say concerning the reasons given by the principals as well as by the pupils regarding elimination, it goes without saying that the enormous amount of indifference on both sides is the most striking feature of the whole situation. This indifference on the part of the principals finds expression in the fact that they are willing to go along from year to year in the same old way content with holding a few out of every 100 freshmen for a senior class. When their attention is called to the matter as it is in this questionnaire asking them to state the reasons therefor, they are content to pass the matter up by saying that the pupils "lost interest," and are willing in only 3.1 per cent of the cases to admit that the fault lies with the teaching force, the system of administration, or the course of study.

The large per cent of pupils showing this indifference is the one thing that makes this condition all the more alarming. The "Outlook" (May 19, 1906), in commenting upon the Massachusetts Report on technical education says, "The salient features of the commission's report are that the first years of employment of those children who commence work at 14 or 15 are often wasted years: that the children leave school because neither they nor their parents see any practical value in remaining there, but that a large majority of the parents could afford to keep their children in school a year or two longer, and would do so if they had an opportunity of securing a training which would make for industrial efficiency."

This same thing might be said of these students for their indifference as well as that of their fathers' is due to the same reason stated here,—they see no practical value in remaining there. Hence we find these schools, which surely are the people's schools, going on from year to year, making slight effort to help these students that need them most and must needs be reached if our civilization is to be lifted to a higher plane of efficiency.

The writer thought perhaps it would be profitable to study this question from a slightly different angle,—that of older

brothers and sisters who left high school before graduation. In this table the information was secured from seniors, graduates, and quitters. Each individual in these three groups was asked why his older brother or sister left high school before graduation.

Let us now turn to this table and see if additional light may be had on the subject.

TABLE LIV

REASONS GIVEN WHY OLDER BROTHERS AND SISTERS LEFT HIGH SCHOOL BEFORE GRADUATION.*

Boys.....357
Girls.....200

Total 557

	Boys		Girls		Total	
	No.	%	No.	%	No.	%
Blank	51	14.3	33	16.5	84	15.1
Death	0	0	2	1.0	2	.4
	51	14.3	35	17.5	86	15.5
To stay at home						
Married	8	2.2	26	13.0	34	6.1
Pressing duties at home	0	0	1	.5	1	.2
Taken out by parents	1	.3	1	.5	2	.4
To work at home	0	0	1	.5	1	.2
	9	2.5	29	14.5	38	6.8
To clerk						
To become manager of a branch store	1	.3	0	0	1	.2
To clerk	1	.3	0	0	1	.2
To become bookkeeper	1	.3	0	0	1	.2
	3	.8	0	0	3	.5
To work						
To accept a position	9	2.5	1	.5	10	1.8
To work	78	21.8	8	4.0	86	15.5
	87	24.4	9	4.5	96	17.3
To teach	5	1.4	16	8.0	21	3.8
To farm	19	5.3	0	0	19	3.4
To enter government service						
Joined the army	1	.3	0	0	1	.2
To become postmistress	0	0	1	.5	1	.2
To take government position	1	.3	0	0	1	.2
	2	.6	1	.5	3	.5

*The data for this table were secured from the questionnaires filled by seniors, graduates and quitters.

TABLE LIV (Continued)

	Boys		Girls		Total	
	No.	%	No.	%	No.	%
To go to other schools						
To enter						
Another school	2	.6	2	1.0	4	.7
Business college	12	3.4	4	2.0	16	3.1
College	7	2.0	3	1.5	10	1.8
Dental college	1	.3	0	0	1	.2
Medical college	1	.3	0	0	1	.2
Preparatory school	6	1.7	2	1.0	8	1.4
State normal	0	0	3	1.5	3	.5
School for nurses	0	0	3	1.5	3	.5
University	1	.3	0	0	1	.2
To secure better advantages in						
Art	0	0	1	.5	1	.2
Expression	0	0	1	.5	1	.2
Music	0	0	2	1.0	2	.4
	30	8.4	21	10.5	51	9.7
Distance from school	1	.3	3	1.5	4	.7
Moved away						
Left town	2	.6	0	0	2	.4
Migrated westward	1	.3	0	0	1	.4
To travel	1	.3	0	0	1	.4
Wanted to go away	0	0	1	.5	1	.2
	4	1.1	1	.5	5	.9
Financial reasons						
Financial reasons	21	5.9	9	4.5	30	5.4
Had no chance	3	.9	0	0	3	.5
Had to help support the family	2	.6	0	0	2	.4
To have spending money	1	.3	0	0	1	.2
To make money	1	.3	1	.5	2	.4
Poor opportunity	0	0	1	.5	1	.2
Wanted to go to work	6	1.7	1	.5	7	1.3
Wanted to make money	2	.6	0	0	2	.4
	36	10.1	12	6.0	48	8.6
Sickness of parents						
Death of mother	0	0	4	2.0	4	.7
Death of father	3	.8	0	0	3	.5
Sickness of parents	3	.8	1	.5	4	.7
	6	1.7	5	2.5	11	2.0
Sickness of pupils						
Ill health	13	3.6	31	15.5	44	7.9
Nervousness	0	0	1	.5	1	.2
On account of eyes	3	.8	8	4.0	11	2.0
Throat trouble	0	0	1	.5	1	.2
Went west for health	1	.3	0	0	1	.2
	17	7.6	41	20.5	58	10.4

TABLE LIV (Continued)

	Boys		Girls		Total	
	No.	%	No.	%	No.	%
On account of the teachers						
Dislike for part of the faculty..	1	.3	1	.5	2	.4
Thought teacher unfair	1	.3	1	.5	2	.4
Unpleasantness with the teacher	1	.3	0	0	1	.2
Teacher would not teach him because he had been to a private school	1	.3	0	0	1	.2
	4	1.1	2	1.0	6	1.1
On account of curriculum						
Did not like the course.....	1	.3	0	0	1	.2
Failed in mathematics	0	0	1	.5	1	.2
Failed on final examination....	1	.3	1	.5	2	.4
Had to spend too much time on studies she would never need	0	0	1	.5	1	.2
It was not a good school.....	0	0	1	.5	1	.2
On account of Latin.....	1	.3	0	0	1	.2
School was not thorough enough	1	.3	0	0	1	.2
	4	1.1	4	2.0	8	1.4
Lost interest, etc.						
Became dissatisfied as all boys do	1	.3	0	0	1	.2
Because she chose to.....	0	0	1	.5	1	.2
Didn't have the grit to stick...	1	.3	0	0	1	.2
Didn't like it	9	2.6	3	1.5	12	2.2
Did not realize the necessity..	4	1.1	1	.5	5	.9
Discouraged	1	.3	0	0	1	.2
Dissatisfied	6	1.7	0	0	6	1.1
Got tired and decided that he was not learning anything...	1	.3	0	0	1	.2
Hated school	1	.3	0	0	1	.2
Indifference	1	.3	0	0	1	.2
Lack of interest	22	6.2	4	2.0	26	4.7
No desire to continue.....	0	0	3	1.5	3	.5
No good reason	0	0	1	.5	1	.2
Not learning anything	1	.3	0	0	1	.2
On his own accord.....	1	.3	0	0	1	.2
Reason of his own.....	1	.3	0	0	1	.2
Said it was no good.....	1	.3	0	0	1	.2
Thought he was smart.....	1	.3	0	0	1	.2
Tired of school	9	2.5	4	2.0	13	2.3
Too lazy to work.....	0	0	1	.5	1	.2
Wanted to quit	8	2.2	3	1.5	11	2.
Wasn't doing any good.....	1	.3	0	0	1	.2
Would not study	1	.3	0	0	1	.2
	71	19.9	21	10.5	92	16.6

TABLE LIV (Continued)

	Boys		Girls		Total	
	No.	%	No.	%	No.	%
Unclassified						
Got interested in newspaper work	2	.6	0	0	2	.4
Joined the railroad service	1	.3	0	0	1	.2
Ministry	2	.6	0	0	2	.4
To learn a trade	2	.6	0	0	2	.4
Would not mind	1	.3	0	0	1	.2
	8	2.2	0	0	8	1.6

The conclusions drawn from this table not only substantiate the preceding conclusions of this chapter but intensify them greatly. That is to say, if the percentages showing the reasons over which the school has control, to work, to stay at home, to teach, to farm, dislike for teachers, dislike for program of studies, lost interest, etc., are added together they will represent over three-fourths of all the answers considered.

Since the answers of the graduates and seniors, as to why pupils leave high school before graduation, coincide with those of the quitters themselves, they corroborate the case made out against the principals as to the gross inefficiency of the high schools. This inefficiency, as is evident from the tables representing the points of view of the graduates and seniors as well as the quitters, consists chiefly in the fact that the high schools fail to grip the pupils. They are not a vital, positive, compelling influence in the lives of the pupils, and hence they leave to find more satisfying surroundings. Let us now turn to the next chapter in which we have asked the pupils to value their high school education and see if the responses there bear out the conclusions reached so far in this investigation.

CHAPTER X

PUPILS ESTIMATE OF THE VALUE OF HIGH SCHOOL EDUCATION.

The purpose of asking the graduates and quitters to express themselves regarding the value of a high school education was twofold: From the graduate we get the reaction of the finished product of the high school, while from the quitter we get the reaction of one who is at the other end of the line, having dropped out of high school for one reason or another. In each instance we get a sidelight from the pupils themselves on the functioning of the high school. The graduate having been out of high school a year is in a position to say definitely if the high school is functioning in his life, and the quitter should be able to say definitely what he thinks he is missing. In either instance, if the high school is a positive, vital force in the lives of its students the answers to this question should reveal it as such.

For comparative purposes both groups of students were required in the first part of the question to confine their answers within a fixed form. Opportunity was given, however, for free expression in the rest of the question. Table LV gives the comparative results obtained from the two groups of students as to the value of a high school education. Table LVI gives the ways in which the graduates feel they are better off than those who never went to high school.

TABLE LV

SHOWING PUPILS' EVALUATION OF THEIR HIGH SCHOOL EDUCATION.*

Standing of Pupils	No. of Question	Result of Standing	Boys			Girls			Totals		
			Yes	No	Blank	Yes	No	Blank	Yes	No	Blank
			%	%	%	%	%	%	%	%	%
Graduate	a	Better Salary	67.6	4.8	27.6	45.1	4.1	50.8	55.1	4.4	40.5
Quitter	a	Lower Salary	42.7	23.1	34.2	26.3	6.5	67.2	37.3	17.6	45.1
Graduate	b	Shorter Work Hours	52.2	12.6	35.2	40.1	5.9	54.0	45.7	8.8	45.5
Quitter	b	Longer Work Hours	39.5	21.0	39.5	21.5	10.4	68.1	33.5	17.5	49.0
Graduate	c	Higher Class of Work	73.2	6.4	20.4	50.1	2.7	47.2	60.6	4.1	35.3
Quitter	c	Lower Class of Work	32.5	23.5	44.0	19.5	9.0	71.5	28.1	18.6	53.3
Graduate	d	Better Social Standing	93.3	.6	6.1	83.3	.9	15.8	87.5	.8	11.7
Quitter	d	Lower Social Standing	27.1	26.2	46.7	14.2	17.5	68.3	23.0	23.0	54.0
Graduate	e	Better Prospects	93.0	1.2	5.8	82.5	.9	16.6	87.0	1.0	12.0
Quitter	e	Poorer Prospects	44.5	21.2	34.3	25.4	10.4	64.2	38.0	17.0	45.0
Graduate	f	Better Chances of Promotion	88.8	.6	10.6	69.9	.9	29.2	77.9	.8	21.3
Quitter	f	Poorer Chances of Promotion	46.9	18.5	34.6	25.4	9.1	65.5	39.3	15.4	45.3

*The data for this table were derived from the questionnaires filled by the graduates and quitters.

TABLE LVI

WAYS THAT THE GRADUATES ARE BETTER OFF THAN ONE WHO NEVER WENT TO HIGH SCHOOL.*

Boys.....166
Girls.....222

Total.....388

	Boys		Girls		Total	
	No.	%	No.	%	No.	%
Blank	8	4.8	101	45.5	109	28.3
None	1	.6	0	0	1	.3
	9	5.4	101	45.5	110	28.6
Mentally						
Advanced in reasoning power	1	.6	0	0	1	.3
Better judge of human nature	1	.6	0	0	1	.3
Better off from a cultural standpoint	0	0	1	.5	1	.3
Better off spiritually	0	0	1	.5	1	.3
Can have deeper thoughts and study deeper things	0	0	1	.5	1	.3
Firm foundation for either book or practical work	1	.6	0	0	1	.3
Grasp a new subject quicker	1	.6	0	0	1	.3
Greater mental development	13	7.8	11	4.9	24	6.2
Greater personal resources	1	.6	0	0	1	.3
Have a broader mind	1	.6	0	0	1	.3
My mind has been strengthened and improved	1	.6	0	0	1	.3
Stronger character	2	1.2	0	0	2	.6
Understand an intelligent lecture	0	0	1	.5	1	.3
More independent in my thinking	0	0	1	.5	1	.3
	22	13.2	16	.8	38	10.3
Better prepared academically						
Gave me the desire to go to the university	4	2.4	2	.9	6	1.5
Got better standing at college	0	0	1	.5	1	.3
Prepared to go to the university	5	.3	7	3.1	12	3.1
Took business course quicker	1	.6	0	0	1	.3
	10	6.0	10	4.5	20	5.2
Better prepared for teaching						
Capable of training children	0	0	1	.5	1	.2
Enabled me to teach to get the money to go to China as a missionary	0	0	1	.5	1	.3
Prepared to teach	0	0	6	2.7	6	1.6
	0	0	8	3.7	8	2.1

*The data for this table were secured from the questionnaires filled by the graduates.

TABLE LVI (Continued)

	Boys		Girls		Total	
	No.	%	No.	%	No.	%
Better social standing						
Am more respected	1	.6	0	0	1	.3
Better companion for myself and others	0	0	1	.5	1	.3
Better social standing	2	1.2	1	.5	3	.8
Can talk with people without embarrassment	0	0	1	.5	1	.3
Capable of entering society	0	0	1	.5	1	.3
Increased number of friends and acquaintances there	3	1.8	1	.5	4	1.2
	6	3.6	5	2.5	11	3.2
Better prepared for a successful career in life						
Am a business man instead of a clod-hopper	1	.6	0	0	1	.3
At least support myself	0	0	1	.5	1	.3
Better chances of success	0	0	2	1.0	2	.6
Better conversationalist	1	.6	8	3.6	9	2.3
Better off for any position	2	1.2	1	.5	3	.8
Better political pull in landing a good job	1	.6	0	0	1	.3
Better prepared to cope with the problems of home and social life	1	.6	1	.5	2	.5
Can do higher class of work	2	1.2	0	0	2	.5
Can help my parents more and better	0	0	1	.5	1	.3
Can keep house better	0	0	1	.5	1	.3
Can make more money	1	.6	0	0	1	.3
Can do more efficient work	0	0	1	.5	1	.3
Enabled me to hear the great call for trained men	1	.6	0	0	1	.3
Get better position more easily	3	1.8	1	.5	4	1.0
Got promotion over two men who had not been to high school	1	.6	0	0	1	.3
Have shorter work hours	1	.6	0	0	1	.3
If my husband should die I could secure a position for myself	0	0	1	.5	1	.3
Know business world better	0	0	1	.5	1	.3
Learn business easier	0	0	1	.5	1	.3
Look on cooking now as a pleasure	0	0	1	.5	1	.3
Made me a better farmer	1	0	0	0	1	.3
Many advantages over an uneducated man	5	3.0	3	1.3	8	2.1
More capable of taking care of the house and helping mother	0	0	2	.9	2	.5
More influence	0	0	2	.9	2	.5
My own boss	1	.6	0	0	1	.3

TABLE LVI (Continued)

	Boys		Girls		Total	
	No.	%	No.	%	No.	%
Prepared better for the legal profession	1	.6	0	0	1	.3
Better salary	6	3.6	0	0	6	1.6
	29	16.8	28	14.3	57	14.6
Broader appreciation of life						
Appreciate my surroundings more	1	.6	0	0	1	.3
Better citizen	1	.6	0	0	1	.3
Better fitted for higher living	2	1.2	1	.5	3	.8
Better morally	6	3.6	1	.5	7	1.8
Better physically	6	3.6	1	.5	7	1.8
Better qualified for a happier and more useful life	0	0	1	.5	1	.3
Better utilizer of time	1	.6	0	0	1	.3
Broader outlook for a life of usefulness and service	0	0	1	.5	1	.3
Broader view of life	9	5.4	11	4.9	20	5.2
Can better appreciate the learning of past generations	0	0	1	.5	1	.3
Can enjoy life better by reading and thinking	1	.6	0	0	1	.3
Enjoy						
Art	2	1.2	0	0	2	
Cultured people	0	0	1	.5	1	.3
Good pictures	1	.6	0	0	1	.3
Leisure moments	2	1.2	0	0	2	.5
Life better	2	1.2	0	0	2	.5
Literature	5	3.0	5	2.2	10	2.6
Music	3	1.8	1	.5	4	1.0
Nature	0	0	2	.9	2	.5
Fuller appreciation of my fellow men	0	0	1	.5	1	.3
Get more joy out of life	1	.6	1	.5	2	.5
Get more out of life	2	1.2	1	.5	3	.8
Great pleasure to be educated	1	.6	0	0	1	.3
Greater self-respect	2	1.2	0	0	2	.5
Have higher ideals	3	1.8	1	.5	4	1.0
Higher conception of life	3	1.8	2	.9	5	1.3
Know people better	0	0	1	.5	1	.3
Learned to like good books	1	.6	0	0	1	.3
Life is richer	1	.6	0	0	1	.3
Life means much more to me	1	.6	0	0	1	.3
Little higher up in life	1	.6	0	0	1	.3
Made life worth while	0	0	3	1.3	3	.8
More ambition	4	2.4	1	.5	5	1.3
More contented with life	0	0	1	.5	1	.3
More inspiration	1	.6	1	.5	2	.5
More service to humanity	4	2.4	0	0	4	1.0
Real satisfaction	1	.6	0	0	1	.3
Realize better my duty as a citizen	2	1.2	0	0	2	.5

TABLE LVI (Continued)

	Boys		Girls		Total	
	No.	%	No.	%	No.	%
Responsibility can be better met	1	.6	0	0	1	.3
Satisfaction that comes from knowing that I have had the work	0	0	2	.9	2	.5
The pleasure of noticing things that would otherwise have passed unnoticed	1	.6	0	0	1	.3
Self-confidence increased	5	3.0	1	.5	6	1.6
	77	47.6	42	19.6	119	32.5
Unclassified						
Better able to approach man higher up and express myself	2	1.2	0	0	2	.5
Better equipped in all ways	6	3.6	5	2.2	11	2.9
Broader interests	1	.6	1	.5	2	.5
Can see how ignorant I am and it gives me determination to go on.	0	0	4	1.8	4	1.0
Have received practice and training in public speaking.	1	.6	0	0	1	.3
It has taught me to maintain any opinion that I may have with readiness and good taste	0	0	1	.5	1	.3
More sympathy for the human family	0	0	1	.5	1	.3
The match has been lighted and I believe the fire will continue to burn	1	.6	0	0	1	.3
They asked my advice in a big deal	1	.6	0	0	1	.3
Those who did not go to the high school come to me for help.	1	.6	0	0	1	.3
	13	7.8	12	5.5	25	6.7

It is evident at first glance that the graduate girls, as shown in table LV, are not very sure in just what ways they are better off, as result of their high school education, than one who never went to high school. Fully one-half of their answers in table LV are in the "blank" column, and 45.5 per cent of them, in table LVI, are also there.

Again those graduate girls who did answer, for the most part, responded in the most general terms. There is nothing definite or specific about their answers. The catch phrases of "better prepared mentally," "better prepared academically," "better social standing" and "broader appreciation of life" embrace

the greater part of their answers. Even the group entitled, "better prepared for a successful career in life," when considered closely, reveal very little that is definite.

The general, indefinite, and evasive type of answers given, together with the fact that practically one-half gave no answer of any nature at all, indicates very conclusively that the graduate girls do not consider their high school education of any special use to them except in a cultural or aesthetic way. If we were to classify their answers according to the purposes of a high school education as stated in the Cardinal Principles of Secondary Education,* they would fall almost entirely under the heading, "leisure time."

What has been said about the general and indefinite type of answers given by the girls as to the value of a high school education, will apply nearly as well to the boys. In table LV, from one-fourth to one-half of the boys' answers are in the "no" or "blank" column, which indicates that, with a large per cent, at least, high school education is not very dynamic.

Although there are only 5.4 per cent of the boys' answers in the "blank" column in table LVI, yet this table too gives strong proof of the indefiniteness of the ideas of the graduate boys regarding the value of their high school education. For example, 13.2 per cent say they are better off mentally, 6 per cent say they are better off academically, and 3.6 per cent say they have better social standing. This position is further strengthened by the fact that 47.6 per cent of the boys state the value of their high school education by saying they have a "broader appreciation of life."

It is gratifying to note, however, that about one-sixth of the boys see in their high school education a "better preparation for a successful career in life." These recognize in their high school education not "mental training," "academic training," or "broader appreciation of life," but ability to do "more efficient work," "to get a better salary," "to make more money," "to succeed better in a business way," "to be a better farmer," etc. These few seem to have sensed the idea that the high school is a place to prepare for the practical duties of life as well as for

*Bulletin 1918, number 35, U. S. Bureau of Education.

college entrance. But, alas, how few they are (16.8 per cent of the graduate boys and 14.3 per cent of the graduate girls). The rest of them give reasons as indefinite as their education is general.

Let us now look at the problem from the viewpoint of the quitters. After they were asked to say if they were getting a lower salary, were working longer hours, etc., by not being a high school graduate, they were asked to state at length what ways they were "worse off" and what ways they were "better off" than if they had graduated. In table LV we saw what they said about salary, work hours, etc., now let us, in tables LVII and LVIII, see what they say about being better or worse off by not graduating.

TABLE LVII

WAYS THAT THE QUITTERS ARE BETTER OFF THAN IF THEY HAD GRADUATED FROM HIGH SCHOOL.*

Boys.....285
Girls.....155

Total 440

	Boys		Girls		Total	
	No.	%	No.	%	No.	%
Blank	125	44.1	82	52.6	207	47.6
No better off	115	39.9	55	36.4	170	39.0
Physically better off						
Have better health	4	1.4	3	2.0	7	1.6
I'm in good physical condition to do anything that comes along and they are not	1	.4	0	0	1	.2
Might have gone blind	0	0	2	1.3	2	.4
Saved my eyes	1	.4	0	0	1	.2
	6	2.2	5	3.3	11	2.4
Financially better off						
Financially	9	3.1	1	.7	10	2.3
Easier on father and mother	1	.4	1	.7	2	.4
I have helped support the family	2	.7	0	0	2	.4
I'm making better salary	1	.4	0	0	1	.2
I'm a help instead of a burden to my family	0	0	1	.7	1	.2
I have a good position and a bank account	1	.4	0	0	1	.2
I'm making money sooner	1	.4	0	0	1	.2

*The data for this table were secured from the questionnaires filled by the quitters.

TABLE LVII (Continued)

	Boys		Girls		Total	
	No.	%	No.	%	No.	%
More comforts in our home than if I had spent the money for schooling	1	.4	0	0	1	.2
Not in debt as I would have been had I gone on to school and graduated	0	0	1	.7	1	.2
Saved books and board	1	.4	0	0	1	.2
Saved hiring a hand on the farm	1	.4	0	0	1	.2
Self-supporting, otherwise worse off	1	.4	0	0	1	.2
	19	7.0	4	2.8	23	4.9
Getting desired training sooner in life						
Can devote full time to my music	0	0	1	.7	1	.2
Got diploma in music	0	0	1	.7	1	.2
Got in Webb's school sooner where I should have been all the time	1	.4	0	0	1	.2
Got through a school of pharmacy two years sooner by stopping	1	.4	0	0	1	.2
Got to go to college	0	0	1	.7	1	.2
Have a business course completed elsewhere	0	0	1	.7	1	.2
Having gone on to a business college I am ready to take a good position	1	.4	0	0	1	.2
I would not be seven months nearer through training for nursing	0	0	1	.7	1	.2
One year better in a preparatory school	1	.4	0	0	1	.2
Will be better fitted for college from this private school when I have graduated	0	0	1	.7	1	.2
	4	1.6	6	4.2	10	2.0
Getting value of real life experience						
Chance to learn more about printing	1	.4	0	0	1	.2
Developing by experience instead of depending on a diploma	1	.4	0	0	1	.2
Good carpenter as it is	1	.4	0	0	1	.2
Had a touch of real life and found that a man needed an education to do well	1	.4	0	0	1	.2
Have a practical business education	1	.4	0	0	1	.2

TABLE LVII (Continued)

	Boys		Girls		Total	
	No.	%	No.	%	No.	%
I would not be started as a commission merchant	1	.4	0	0	1	.2
Know more about farming	1	.4	0	0	1	.2
Learned ups and downs of life while out	1	.4	0	0	1	.2
	8	3.2	0	0	8	1.6
Unclassified						
Better chances of promotion	2	.7	0	0	2	.5
By receiving this good job as manager of a branch store	1	.4	0	0	1	.2
Got a position sooner	1	.4	0	0	1	.2
Had I associated with the teachers and pupils I would have had a hateful disposition	0	0	1	.7	1	.2
Have more leisure time as it is	0	0	1	.7	1	.2
I'm a happy housekeeper as it is	0	0	1	.7	1	.2
I would have practically lost my time on something absolutely worthless	1	.4	0	0	1	.2
I might have had a cleaner job but I guess I draw down as much pay as the fellow who graduated	1	.4	0	0	1	.2
Rather be carriage maker and have the money	1	.4	0	0	1	.2
Would have missed this position I got	1	.4	0	0	1	.2
	8	2.8	3	2.8	11	2.2

TABLE LVIII

WAYS THAT THE QUITTERS ARE WORSE OFF THAN IF THEY HAD GRADUATED FROM HIGH SCHOOL.*

Boys.....285
Girls.....155

Total 440

	Boys		Girls		Total	
	No.	%	No.	%	No.	%
Blank	180	63.0	104	67.7	284	65.3
No worse off						
I find some educated at work on the road	1	.4	0	0	1	.2
"None"	45	15.8	19	12.3	64	14.7
None, if I continue to farm	1	.4	0	0	1	.2
None, judging from the good that I have seen it do others	1	.4	0	0	1	.2
No worse off than the fellow who has had foreign languages	1	.4	0	0	1	.2
	49	17.4	19	12.3	68	15.5
Limited in wage earning						
Hard to get better salary	5	1.8	0	0	5	1.1
Limited in preparation for life-work						
Ambitions of life are not realized	0	0	1	.7	1	.2
Don't know as much about farming	1	.4	0	0	1	.2
Not prepared for what I want to make my life-work	1	.4	0	0	1	.2
Not prepared to meet the requirments of our nation	1	.4	0	0	1	.2
	3	1.2	1	.7	4	.8
Limited in variety and grade of occupation						
Can't be independent of the help of others	0	0	1	.7	1	.2
Can't do scientific work	1	.4	0	0	1	.2
Can't do my work as well	0	0	2	1.3	2	.4
Can't get a job as quickly	1	.4	1	.7	2	.4
Can't work for myself	0	0	1	.7	1	.2
Have to work harder	2	.8	1	.7	3	.6
Have to work to pay board	1	.1	0	0	1	.1
Not qualified to do any kind of business	0	0	2	1.3	2	.5
Can't get as good a position	7	2.5	2	1.4	9	2.2
Can't get as good a recommendation	0	0	1	.7	1	.2
Can't get a clerkship in office	1	.4	0	0	1	.2
Can't vie with old classmates	1	.4	0	0	1	.2

*The data for this table were secured from the questionnaires filled by the quitters.

TABLE LVIII (Continued)

	Boys		Girls		Total	
	No.	%	No.	%	No.	%
Could not get as high class of work if I had to earn my living	0	0	1	.7	1	.2
Not having the education to take a job if it should turn up	1	.4	0	0	1	.2
You don't get as good view of the world and how it is carried on	1	.4	0	0	1	.2
	16	6.1	12	8.2	28	4.5
Limited in teaching profession						
Can't teach	0	0	1	.7	1	.2
Harder to get a job of teaching	0	0	2	1.3	2	.4
I can't teach anything but elementary school. If I had graduated I could teach in the high school	0	0	1	.7	1	.2
	0	0	4	2.7	4	.8
Limited in academic training						
Behind in my studies	1	.4	1	.7	2	.4
Can't go to the university	7	2.5	3	1.9	10	2.3
Can't take a business course because I do not know mathmetics and English	1	.4	0	0	1	.2
I could have gone to a dental college	1	.4	0	0	1	.2
I feel that my flow of English is not what it would have been had I finished high school	1	.4	0	0	1	.2
I might have gone through college as it is I will have to farm	2	.8	0	0	2	.4
Penmanship and English would have been better	1	.4	0	0	1	.2
Spelling and English would have been better	1	.4	1	.7	2	.4
	15	5.6	5	3.3	20	4.6
Limited in mental training						
Am not well developed in brain-thinking	1	.4	0	0	1	.2
Can't have a degree	1	.4	0	0	1	.2
Can't speak English correctly and need more arithmetic	1	.4	0	0	1	.2
Have no diploma	2	.8	0	.7	3	.7
I cannot tell anything as I would like or handle business as I should be able to	1	.4	0	0	1	.2
Just not got as good education	5	1.8	3	2.0	8	1.9

TABLE LVIII (Continued)

	Boys		Girls		Total	
	No.	%	No.	%	No.	%
Lack of mental culture keeps me handicapped as I want to take a business course.....	1	.4	0	0	1	.2
Less knowledge and narrower views	1	.4	0	0	1	.2
"Mentally"	0	0	2	1.3	2	.4
Not the scholar I should like to be	1	.4	0	0	1	.2
	14	5.3	6	4.1	20	4.4
Unclassified						
Can't be great	0	0	1	.7	1	.2
Get less pleasure out of life...	0	0	1	.7	1	.2
In many ways	0	0	2	1.4	2	.4
Often accused of failure.....	1	.4	0	0	1	.2
Reputation for not sticking....	1	.4	0	0	1	.2
Wouldn't have present position	1	.4	0	0	1	.2
	3	1.2	4	2.8	7	1.4

In considering the value of a high school education from the viewpoint of the quitters, attention is called to three things: First, that practically one-half of all the quitters in table LV are in the "blank" column, and practically two-thirds of them in the same table are in either the "no" or "blank" column, meaning that they are no better off; second, that 47.6 per cent of the quitters in table LVII are in the "blank" column, and 39 per cent state that they are no better off; third, that 65.3 per cent of the quitters, in tables LVIII are in the "blank" column and 15.5 per cent state that they are no worse off. In other words 86.6 per cent of the quitters practically say that they are no better off than those who graduated; and 80.8 per cent of them say that they are no worse off. What stronger evidence of indifference on the part of the quitters can be found than this, or what better proof can be had to substantiate the fact that the high school is not a live, vital, dynamic force in the lives of those who leave before graduation? What really happens, it seems, is that the large majority of those who enter high school leave after a time for one reason or another, usually from choice rather than necessity, without being able to say definitely whether they are better or worse off by not graduating.

Of the 19.2 per cent who do state definitely that they are worse off, about one-half (9 per cent) of them state their limitations in academic terms. By not graduating from high school they see that they are not "mentally trained" and can not have a college career. If we look for answers showing their limitations from a practical point of view as "financially," "preparation for life-work," "variety and grade of occupation," etc., etc., we find a negligible quantity. Evidently the high school did not appeal to them very much if only about 10 per cent of all those who quit feel that they are limited in their preparation for their life-work, or in the variety and grade of their occupations.

However, 13.4 per cent of these quitters gave some very definite reasons why they think that they "are better off" by not graduating from high school. A glance at table LVII will make plain this fact. In it they say that they are better "physically" and "financially" and that they are "getting desired training sooner in life" and "getting the value of real life experiences." This shows that a few, at least, left high school for some very definite reasons and have some very definite ideas as to the functioning of a high school education.

In concluding this chapter, the writer wishes to call attention to two things; namely, the general indefinite, and vague character of the graduates' answers as to the value of a high school education, and the striking indifference which characterizes the answers and attitude of the quitters. The atmosphere which surrounds the graduates' answers is indicative of the classical and traditional spirit which dominates the high schools from which they come, while the enormous amount of indifference on the part of the quitters indicates clearly that these same high schools failed entirely to grip them while they were still students. As these two conditions already have been discussed, they need no further comment.

CHAPTER XI

CONCLUSIONS AND RECOMMENDATIONS

Since each chapter of this dissertation is concluded with a definite summary of the findings therein, it is not deemed necessary to end the discussion with a general summary. A few broad conclusions stated here will lay the basis for the recommendations which follow.

1. It is evident that the high schools are organized on the wrong basis. As has been said repeatedly in this treatise, the basal occupations of a community should be the determining element in the organization of its high school course of study. In this instance, agriculture for the boys and home-making for the girls are the two predominating vocations; whereas the classical and traditional elements in the high school program of studies eclipse those of a vocational and scientific nature.
2. As a result of the condition pointed out in the above, these high schools are preparing their pupils for one calling, while in fact they are entering others. For example, the chief emphasis is falling on the classical and traditional courses which prepare primarily for college entrance and pave the way for professional careers, although only about 5 per cent of the students will ever enter the professions.
3. The very fact that the few who do graduate value their high school education in terms of college entrance explains why the great groups that drop out of high school to enter the industrial, commercial, or agricultural fields, place so little value on high school education.
4. The training given in the high schools is considered primarily as a means to an end, or preparation for college entrance, with little thought of being an end in itself such as training for immediate vocations. This forces students who plan non-college careers to seek special schools for training which they should receive from the high school.
5. Heavy elimination is but proof of the fact that these high schools are playing a very small part in the lives of their pupils.

6. The lack of co-ordination between the training given and occupations followed by the students together with the lack of intelligence displayed in the evaluation of the various subjects in the program of studies evidences the great need of vocational guidance or educational guidance in these schools.
7. There is a decided need for teacher-training as a part of the educational program of these high schools.

The line of argument made all through this study plainly shows that the only logical conclusion calls for a thorough reorganization of the program of studies. Instead of the program of studies being overwhelmingly classical and traditional, it needs to be re-evaluated in terms of the occupations of the state and re-directed along modern lines in order that the classical and traditional subjects may form but one of the curriculums which should compose the general program of studies. This shifting of the basis of the program of studies would necessitate not only a change in the quantity and kind of subject matter offered but also a shifting of the emphasis placed on the subject matter. The present regime which stresses primarily college preparatory work will have to give way to a broader and more comprehensive program which has for its objectives those outlined in the bulletin entitled Cardinal Principles of Secondary Education* by the N. E. A. Committee on the Reorganization of Secondary Education.

The size of these schools together with the variety of occupations followed by the people of the community necessitates the perpetuation of the general high school. But the general high school will vary according to the occupations of the people who support it. Accordingly, it shall be the purpose of these last few pages to offer some recommendations as to the re-organization of the program of studies for these first-class county high schools of Tennessee.

Before setting down the specific recommendations let us recall that home-making, commercial work and nursing are the only three occupations which claim as many as 2 per cent of any

*Bulletin, 1918, number 35, U. S. Bureau of Education. The objectives named in this bulletin are: Health; command of fundamental processes; worthy home membership; vocation; citizenship; worthy use of leisure time; ethical character.

of the groups of girls studied; that only about 5 per cent of all the boys who enter these high schools will ever enter the professions; that farming will be the chief occupation of the 95 per cent of the boys who enter non-professional careers; and that the occupations of next importance to farming will be manufacturing and trade, clerking, artisan, teaching, and transportation. In order to build a course of study for the general high school that will meet the needs of a people whose basal occupations are those mentioned above, the following recommendations are suggested:

1. In the first place the emphasis in the program of studies should be shifted from the classical and traditional to the scientific and vocational point of view.
2. The amount of formal mathematics should be decreased and the amount of practical arithmetic increased.
3. Foreign language is over-emphasized. The amount of Latin should be reduced in favor of the modern languages.
4. The content of the social science group should be changed so that there would be more work done in civics and American history and less in ancient and medieval history. In fact, just the reverse of the ordinary procedure in our high schools would be much better. Instead of starting our large freshman and sophomore classes, the majority of whom will never become juniors even, on ancient and medieval history we should have them spend their time and energies on civics, American history, and history of modern Europe, retaining for the few who are fortunate enough to reach the junior and senior years the task of working the less productive fields of ancient and medieval history. In other words, we need to reverse the present machinery which we have geared up for history so that we can make the most of our opportunity for teaching citizenship in the high school.
5. The practical arts work should also be greatly increased. It seems a parody on education for each senior girl to graduate with 1.3 units of home economics and 2.6 units of social science; 2.9 units of foreign languages; and 3.4 units of formal mathematics. The value the school authorities place on home economics work is still better understood when we realize that

each senior girl goes out with 1.3 units of home economics work and 1.5 units of algebra. This is true despite the fact that over three-fourths of these girls in these high schools remain in the home and over one-half of them never get beyond the sophomore year of the high school. Again the senior boy will leave these high schools with one-third of a unit of manual training and 2.3 units of foreign language; 2.7 units of social science work; and 3 units of formal mathematics. This also is true despite the fact that the second largest occupation anticipated by senior and graduate boys is manufacturing and trade, followed closely by the occupations of farming and artisan which correlate very highly with manual training.

6. It is evident that there is a felt demand for commercial work in these high schools. The very fact that 12.6 per cent of the graduate boys and 6.3 per cent of the graduate girls feel the need of some practical business training as a preparation for their life-work shows that these high schools are woefully deficient along the commercial lines. Table XXIV shows that for the boys there is an equally strong demand. If we combine the percentages of those who either expect to enter or are engaged in work that has at its base commercial training (federal or city employees, transportation, clerical assistance, middle men, manufacturing and trade) we will have 22.4 per cent of the seniors and 16.2 per cent of the graduates anticipating these callings and 28.8 per cent of the graduates, 31 per cent of the older brothers who graduated, 52.2 per cent of the older brothers who did not graduate, and 28.6 per cent of the quitters. What stronger argument could one want for commercial training in these high schools?
7. After this study was started, public sentiment forced a law to be enacted making teacher-training a part of the educational program of Tennessee. That it was a needed law is seen from the fact that teaching is the largest occupation anticipated or engaged in (outside of the home) by any single group of girls; and that it is one of the largest anticipated by the senior and graduate boys.
8. Not only should music and drawing be included in the program of studies of these high schools, but they should be recognized as the means of developing some of the basal elements in a high school pupil's education.

9. The natural science group should be enhanced and extended so that it would become the core of the entire program of studies, for the physical, chemical, and biological sciences are at the base of all modern life and activities. If this be true, the justice of this position is apparent when we recall that we are dealing with an agricultural community in which three-fourths of the girls of all the groups studied are occupied at home and from one-fourth to one-half of the boys of all the groups studied are on the farm. To be more specific it is perhaps best to discuss some of the various subjects of this group separately.

    a. *Physics.* This seems to be the most popular science offered in these high schools. This is true in all probability from the fact that the apparatus is not so expensive as it is for chemistry or for some of the other natural sciences. When taught as it should be with emphasis on labor-saving devices for the home and the mechanics of the farm and shop, it is of tremendous value to high school students. Especially is this true when it is properly correlated with manual training in its more practical phases.

    b. *Chemistry.* Nothing should be more appealing or helpful to a group of farm boys than a study of the chemistry of seeds, soil, tools, etc., or to girls than the chemistry of a balanced ration or of the textiles and fabrics used in the home. Certainly there is nothing more fundamental to these boys and girls than a thorough, scientific knowledge of the life they are to live.

    c. *Biology.* Here again the problems involved in the study of biology are vital because they touch these rural boys and girls at every angle. In one sense the farmer's whole activity is dealing with the biological sciences. The germination and propagation of seeds and the care of plants and animals, involve the major part of his time and work.

    d. *Agriculture.* So much has been said already on the subject of agriculture that it seems hardly necessary in this connection to continue the discussion. It has only been within the last decade or so that the American people have come to recognize the need and place of scientific ag-

rieulture. As is the ease with all other reforms, the public schools have been slow to recognize it and incorporate it into their programs. Although much has been done through our Agricultural and Mechanical colleges, experiment stations, and special high schools, yet much remains to be done before agricultural instruction is fully appreciated and put on a par with the older subjects of the course of study. Frequently very little care is exercised in the selection of an agriculture teacher, while it is a matter of great import when it comes to the selection of a mathematics or Latin teacher. For example, in the ———— County High School referred to previously in this work, the poorest equipped and most poorly paid teacher of the faculty taught chemistry and agriculture, while the principal taught history and French. The writer knows personally that in one of these sixty first-class county high schools the teacher of agriculture was an honor graduate in the department of Latin in one of the Southern universities and had taken a summer term of six weeks in the department of agriculture in another Southern university as his only preparation for teaching the subject. These typical illustrations show where the emphasis falls and what relative value is placed on the various subjects of the course of study.

e. *Physiology and Hygiene.* Perhaps the most startling revelation that the World War has made to the school authorities of America is the deplorable physical condition of our young men, due largely to the neglect of health education in our public and private schools. "School Life" of August 16th, 1918, contains the following statement: "The war has brought home to us the failure of schools in this particular as nothing else could have done. Of the two and one-half million men examined for the National Army in 1917, 34 per cent were found physically unfit for military service and were rejected. A careful estimate places the number of men suffering from remediable defects at over one-third of this number. It is felt that the schools have an opportunity and a duty here

> that must not be neglected." This implies not merely a scientific and intensive study of physiology and hygiene but a broader and more comprehensive view of health education in general. It means medical inspection of schools; school nurses; high school courses in first aid to the injured; home care of the sick; feeding the family; enlarged playgrounds with ample facilities for all forms of athletics and gymnastics; more commodious buildings properly heated and lighted with gymnasiums and swimming pools. In fact, it means a re-evaluation and a re-direction of the work done in health education in our high schools the country over.

This re-organization and re-direction of the program of studies along the lines suggested above should vitalize these high schools more and bring them into closer touch with the life and vocational activities of the people they serve. This would mean, necessarily, a shifting of the point of view, and, consequently, a changing of the emphasis from the classical and traditional to the scientific and vocational. It would not mean at all the elimination of the classical element from the high school program of studies, but rather a reduction of it to its proper relation to the other elements of the program of studies.